

SCHEMES FOR THE TINNEVELLY DISTT.



From R. K. PUCKLE, Esq., Collector of Tinnevelly, to the Acting Secretary to the Board of Revenue, dated 11th September 1868.

I HAVE the honor to submit for approval, a scheme for the Settlement of the river-irrigated villages of the Tinnevelly District.

2. The preparation of data for the Settlement of these villages at once, without waiting for Proceedings No. 4,923 dated 19th July 1866. the classification of the rest of the district, was sanctioned by the Board of Revenue in consideration of the peculiar circumstances of these villages, and their dissimilarity to any other part of the district.

3. GENERAL DESCRIPTION OF THE DISTRICT.—The district of Tinnevelly includes the country between the Madura frontier and Cape Comorin and between the Gulf of Manaar and the Western Ghauts. It is 120 miles in length by a maximum of 75 miles in breadth, and has a population of a million and a half. Its total

The actual boundary is about 8 miles north of Cape Comorin, the Cape itself being in Travancore territory. area is 5,145 square miles, of which 1,648 square miles are Zemindari and Inam, and 3,497 square miles are ryotwari. The Settlement about to be made will affect the latter only, the Zemindari and Inam villages being already permanently settled. In the ryotwari villages, 2,035 square miles are cultivated, 1,241 square miles are occupied by hills, roads, streams, tanks, village sites, &c., and 221 square miles are waste, but fit for cultivation.

4. In general appearance, Tinnevelly is not picturesque, the north eastern portion being a level plain of black cotton ground, and the south eastern portion a mere stretch of sand; but at the foot of the western mountains and along the river valley the country is wild and beautiful, and the cultivation is as rich as in any part of the Carnatic.

5. MODE IN WHICH THE DISTRICT HAS BEEN LAID OUT FOR SETTLEMENT.—Though the river valley, as I have here styled the river-irrigated villages, differs so materially from any other part of the district, it must not be supposed that the remaining villages can be lumped together and treated in one uniform manner; for the district contains four tracts of country, so entirely distinct from each other in soil, situation and produce, that each should be treated separately, and have its own peculiar Settlement.

6. *The river valley.*—The river valley comprises the whole country watered by the Tambrapurni and its affluents,* 15 in number. In many respects it is like the Cauvery valley, but it has some characteristics of its own. The sub-soil generally is clay instead of sand; the lands are mostly irrigated from channel-fed † tanks instead of from the river direct, and the care bestowed upon the land, and the pitch of excellence attained in cultivating it, is in pleasing contrast to the careless system of husbandry pursued in the Cauvery Districts. Some of the principal towns of Tinnevelly are situated in this valley. Tinnevelly, the Capital of the district and the Military Cantonment of Palamcottah are within 3 miles of each

No. of ryotwari villages	Area in square miles
845.	798.

*The Jambunadi,	Arudakanniar.
Ramanadi.	Vuranadi.
Karupanadi.	Lluppiar.
Anumanadi.	Gatananadi.
Haribaranadi.	Manimuktanadi.
Bandaundiswaranadi.	Koriar.
Ainderuvinadi.	Pachiar.
Sittar.	

*There are 580 agaput or channel-fed tanks in the river valley.

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other, though on opposite sides of the river. Veeravanellur 15 miles and Kalladakurichi 20 miles west of Palamcottah, not only supply Travancore with much of the cloth worn by the people, but are the granaries from whence vast quantities of rice are exported both to the north and south. Besides these, there is the sanitarium of Courtallum which, unlike other places resorted to for their climate in India, is at the foot of, and not on the hills, and is cool and pleasant from June till October, or during the prevalence of the south-west monsoon.

7. *The Palmyra Forest.*—The palmyra forest includes the coast line south of the river, and is some 50 miles in length by from 5 to 10 miles in breadth. The Palmyra palm here takes the

No. of Ryotwari villages.	Area in square miles.
101.	308.

place of cereal grains, and is cultivated by a

large population, who live almost entirely on the fruit and juice of the palm. The country is all deep sand, nearly impassable for wheeled conveyances; water is by no means abundant, though it is to be found in some places, while grain, fruit and vegetables can hardly be had at all. The barren aspect of this region and the scarcity of all necessities of life have hitherto deterred the higher classes from attempting to settle in it, so the Shanars or palmyra climbers are almost the only occupants. The palmyras are estimated to number a million and a half, besides many millions of young trees that have not yet come to maturity, and are as yet free from tax. The full-grown

The aggregate tax on palmyras throughout the district is 1,15,657 Rupees, but the figures here given apply only to the palmyra forest.

Vide paragraphs 78-80.

trees, taxed at a few pices each, yield a revenue of 60,000 Rupees per annum, and as it is part of the scheme of settlement to allow of the redemption of the tax on trees growing on any land paying land tax, it is hoped that the great bulk of these trees will soon become tax free.

8. *The Red-soil Tract.*—The tract of red soil at the foot of the hills on the western front of the district, much resembles parts of Sal and is similarly intersected by small streams and diversified by hill and hollow. On the higher

levels the soil is poor, and hardly worth cultivating, but in the hollows and along the course of the streams the soil is excellent, and a good deal of rice is grown. As is commonly the case in districts partly Zemindari, the richest villages are held by Zemindars; the Settur, Sivagiri, and Choc-

* Strivilliputtur.
Sankaransinarkovil.

kampatti Zemindars occupying a large tract of country immediately at the foot of the hills. There are, however, many ryotwari villages to the

north and east of these Zemindaries, besides a large number clustered together to the south of the river valley. There are only two large* towns in this division, and these are more famous for their pagodas than for their manufactures or trade.

9. *The Black Cotton Plain.*—The Black-cotton plain lies north of the river, and between the red-soil tract and the sea. A considerable portion of it is held by the Ettiapuram Zemindar, who pays a tribute of nearly a lac of Rupees

per annum. There are also minor Zemindaries, besides the Ryotwari villages. The soil is deep alluvial deposit, over-lying a substratum of lime stone, and is cultivated to the very utmost. In fact, from the Madura border to the Sittar river, a distance of 50 miles, there is hardly a waste field to be seen, the dry land being prized as highly in this locality as ordinary irrigated land is elsewhere. This dry land grows two crops in the year, generally, Cotton and Cholum. An immense quantity of Tobacco is also grown here, Virdupatti and Sivakasi being centres of the Tobacco and Cotton trade. A line of railway from Tuticorin is projected to pass through this part of the country, to bring cotton down to the coast and carry back salt in return. The old Dutch Settlement of Tuticorin has a natural harbour for native craft, which ply continually in the Gulf of Manaar, between the main land and Ceylon. The European merchants of Tuticorin have several Cotton screws, and 32 Ships, with an aggregate of 18,448 tons burden were loaded last year for England.

10. RESOURCES OF THE DISTRICT.—The exports of Tinnevelly are cotton cloth, coffee, rice, tobacco, senna and palmyra-jaggery, and the imports are piece goods from Europe, and coco-a-nuts, salt-fish and spices from Ceylon and Travancore. The exports are so vastly in excess of the imports in value, that the flow of money is always into the district, and if the value of the cloth, rice, coffee, tobacco, senna and palmyra-jaggery exported, aggregates half that of the cotton shipped at Tuticorin, we have nearly a million sterling received annually against only a trifle out-going.

80,000 bales of cotton are annually shipped from Tuticorin, which at 6d. a lb., the price now paid to the cultivator, are worth £ 600,000. Those however who are best able to form an opinion on the subject, assure me that upwards of nine millions sterling have been paid at Tuticorin for cotton during the last 7 years. The value of the cloth carried into Travancore by land during the last year of the frontier customs was £ 84,000, and the value of the coffee and senna shipped last year was £ 30,000. We have no reliable return of the exports of rice, tobacco and palmyra-jaggery, as these are carried by land mostly northwards, but as the traffic on the main line of road through the district aggregates 200,000 tons per annum, the trade in these staples must be very considerable.

11. As far as food grains are concerned, the district is self-supporting. In the north, more than enough dry grain is grown for home consumption, and the deficiency of rice is made up by imports from the river valley. In the centre, rice is over-abundant, and some dry grain is grown for the food of the poorer classes. In the south, the people live on their palmyras, and on what little grain they grow, eking out in times of scarcity by imports from the river valley.

12. The total revenue last year was Rupees 41,59,550, namely:—

	Rs.
Land Revenue.....	30,49,820
Salt	7,13,846
Stamps	2,26,233
Abkarry	81,502
Sea Customs	71,122
License tax	17,027
	<hr/>
Total... 41,59,550	

13. Tinnevelly comes next to Tanjore in average assessment, each ryot holding a puttah paying upwards of 21 Rupees, and each man, woman and child in the district contributing yearly 10½ Annas towards miscellaneous items of revenue.*

District.	Ryots paying								Total.	Average Assessment per head.
	1,000 Rupees and up- wards.	From 500 to 1,000.	From 250 to 500.	From 100 to 250	From 50 to 100.	From 30 to 50.	From 10 to 30.	Under 10 Rupees.		
North Arcot...	1	2	24	506	2,191	4,932	24,878	89,205	1,21,739	9½
South Arcot...	6	51	217	2,170	7,388	12,488	54,251	1,53,938	2,30,509	10½
Salem	0	4	12	250	1,225	3,988	34,531	1,10,331	1,50,342	8½
Coimbatore ...	1	18	72	590	2,290	4,731	26,196	83,087	1,16,988	10½
Tanjore	187	658	1,770	6,230	9,343	10,981	28,666	59,294	1,17,124	34½
Trichinopoly..	26	65	216	1,358	2,312	4,229	21,066	92,010	1,21,277	10
Madura	1	14	76	821	2,936	5,511	25,378	88,059	1,22,796	10½
Tinnevelly ...	98	295	949	3,728	6,971	8,510	30,774	85,341	1,36,666	21½

In 1866 the price of paddy rose to 13½ Rupees per Cottah of 110 Madras measures, which is equivalent to 4 Annas a measure for husked rice.

14. The resources of the district were severely tested during the past few years of scarcity, when although current prices were actually higher than in some of the famine districts, no signs of distress were visible and no assistance was asked for.

15. POPULATION.—There are very few north country Musselmen in Tinnevelly, though there are numbers, of Lubbies, who are mostly merchants and weavers. In the north, there are Reddies and Naiks, both of Telugu origin, and some few families of Reddies have found their way as far south as Nanguneri. The Reddies are a hard-working race, who lay out all they can get on the soil, and are thus most useful agriculturists. The Naiks are the descendants of the soldiers who overran the kingdom of Madura some 400 years ago; as a race they are very improvident, but here they seem to have imitated the Reddies, and in many instances have become considerable landed proprietors.

16. Siva Brahmins are numerous throughout the richer parts of the district, but Vishnu Brahmins mostly congregate near their large pagodas at Strivilliputtur, Nanguneri, and Alwartirunagari.

17. The Vellalahs are the most numerous and influential class in Tinnevelly. They are to be found everywhere, and as their name implies, were originally cultivators of the soil. They do not now confine their attention to agriculture, but wherever money is to be made, or power is to be had, the Vellalahs are sure to be foremost. Astute calculators and enterprising tradesmen, they are well adapted for managers, brokers, and agents, and as Government servants they fill the Courts and Cutcherries, and have almost monopolized the office of Village Accountant.

18. The Maravars are of the same family as the Kullers of Madura and Tanjore, and were

"The Colleries inhabit the woods between Trichinopoly and Cape Comorin. The name in their own language signifies thieves (Kallar mis-called "Kalleri or Collery") and justly describes their general character. Their weapon is a pike 18 feet long, with which they creep along the ground and use with great address in ambuscades. They are so far from thinking it a disgrace to be accounted thieves that they value themselves for excelling in their profession, and relate to strangers, stories of desperate and successful thefts with as much complaisance as other people commemorate the heroic actions of their ancestors, and indeed when booty is their object, they regard danger and death with indifference. They sail in the night from their recesses and strong holds to plunder the inhabitants of the neighbouring villages of their cattle, which if they cannot bring away alive, they kill with their long spears." *Orme's history.*

The Ramnad and Sivaganga Zemindaries were attached to Tinnevelly when the country came under our rule.

Madura and all Tinnevelly was known as the Maravar country.

19. The Tanjore Kallars are now in a transition state, and some of them do manual labour, but the Tinnevelly Maravars will not labour for hire. A great change has, however, come over them of late; they are no longer open free-booters, but mostly confine themselves to their occupation as village-watchmen, and many of those not thus employed have settled down to agriculture, and have abandoned their predatory habits.

20. The Shanars or palmyra climbers are thus described by Dr. Caldwell who has spent many years among them. "Their hereditary occupation is that of cultivating and climbing the

" palmyra palm, the juice of which they boil " into a coarse sugar. The majority of the Shanars confine themselves to the hard and weary " labour appointed to their race; but a considerable number have become cultivators of the soil, " as landowners or farmers or are engaged in trade. There is reason to suppose that the Shanars " are immigrants from the Northern coast of Ceylon, as it is traditionally reported that the " Shanars who inhabit Tinnevelly came from the neighbourhood of Jaffna. A Shanar will climb " a palmyra almost as rapidly as a man will walk the same length, and most of them are accus- " tomed thus to climb fifty trees twice a day or even three times a day for eight months in the " year. Taking 60 feet as the average height of a palmyra, and the climbing of 50 palmyra trees " twice a day as the average work of an able-bodied Shanar, we shall form a clear idea of the " amount of his work if we suppose him every day for the greater part of every year to climb a

Lectures on the Tinnevelly Mission.

" perpendicular pole 3,000 feet in height, and then to descend the same pole the same day
" ascending and descending without any apparatus, and supporting the entire weight of his body
" by his strength of limb alone."

21. "The chief peculiarity of the Shanars, prior to their reception of Christianity, was the
" prevalence amongst them of demonolatry or
Many thousands of the Shanars are Christians, and four of
our principal Mission Stations are in the palmyra forest.
" the worship of evil spirits. No where does it
" prevail to a greater extent than in Tinnevelly,
" where it constitutes the religion of the Shanars
" and of the whole of the lower classes, and enters very largely into the religion of the middle
" classes. The objects of worship are neither gods nor heroes, but demons, which are supposed
" to have got the actual administration of the affairs of the world into their hands, and those
" demons are so numerous and cunning, so capricious and malicious and powerful, that it is neces-
" sary to worship them very sedulously to keep them from doing mischief.

22. "The most important and essential feature in the worship of all demonolators is the
" devil-dance. The officiating priest or devil-dancer who wishes to represent the demon, sings and
" dances himself into a state of wild frenzy and leads the people to suppose that the demon
" they are worshipping has taken possession of him, after which he communicates to those who
" consult him, the information he has received. The fanatical excitement which the devil-dancer
" awakens, constitutes the chief strength and charm of the system, and is peculiarly attractive to
" the dull perceptions of illiterate half-civilized tribes. The votaries of this system are the most
" sincerely superstitious people in India. There is much ceremony but little sincerity in the more
" plausible religion of the higher classes, but the demonolators literally believe and tremble. In
" times of sickness, especially during the prevalence of Cholera, it is astonishing with what eager-
" ness, earnestness, and anxiety the lower classes worship their demons."

23. The Pullers were lately slaves but are now agricultural labourers. They are never found north of the Coleroon, or far away from the rice lands, and are peculiar to the Trichinopoly, Tanjore, Madura and Tinnevelly Districts. They receive annual wages in kind, and seem to have but one object in view, and that is to do as little as they can for their wages. Some few have land of their own, but none have yet acquired any considerable amount of property.

24. There are no Brinjaries, Lumbadies, Wudders, Salt Koravers, or other roving tribes in Tinnevelly. The Pariars are not numerous, but they are found in various parts of the district.

Paragraph 4 of Board's Proceedings No. 1,546 dated 6th May 1867.

The Cottah of grain is equal to 5½ bushels.

The Cottah of land is equal to 16·2 Acres.

Converting the grain into money at the Ulungu price of Rupees 2.11.4½ per Cottah, a fair commutation rate even for that early period.

This fact probably gave rise to the early prejudice against ryotwari, which was supposed to involve a rental in kind.

MAHOMEDAN SYSTEM.— 26. The revenue system of the Mahomedans, if system it can be called, was on the contrary a mere trial of how much the district could bear by the exaction of

the utmost that the ryots could pay. The grain assessment of the Hindus was raised to 8 and 4 Cottahs, for river-irrigated, and tank-irrigated lands respectively, with the addition of a Yavanah,

or fee, of Rupees 4-10-6 per seed Cottah. So far, no harm was done, the aggregate assessment

being much the same as before; but the grain-rent was soon after abolished in favor of a money

rent, the grain being commuted into money at current selling prices, while the fee was raised to Rupees 8-4-9 per seed cottaah. No one scale of assessment however lasted for any time. Changes

were made according to the fancy of each renter, or on the occurrence of any pressing emergency. One year a Nazzar was added, another year the fee was reduced, but the landlord's share of the

1770.

1774.

1784.

1791.

produce was raised. The fee was then raised again till the ryots were unable to pay. At one time the commutation rate was fixed at the market price, and at another at a little above it. All this was changed again for a division of the net

produce, one-half being taken by Government, plus fees and Nazzars and a certain extra allowance of grain. Next, 60 per cent. of the gross produce was taken as the Government share, and during the last few years of Mohomedan rule, an equal division of the net produce was again reverted to, but the fees of all kinds were raised.

27. ENGLISH SYSTEM.— When the country came under British rule in 1801, the first Collector endeavoured to impress on the ryots "a sense of the moderation and justice of the "Company, and of the stability of their Government, by advances to the extent that might be

A straw tax, channel merah, desacaval or black mail to the Poligars, Carnum's russoom, &c., continued for some time, and were abolished at a much later period,

"actually required for the repair of the tanks "and water-courses that had been falling unin-
"terrupted into decay since the extinction of

"the Hindu Government." Some of the fees and all the Nazzars were abolished, and deducting cultivation expenses, the net produce was divided equally between the Government and the ryot. The people were naturally suspicious, and "unwilling to accept the responsibility of a money rent," for a division of the produce with the renter was the only security they had lately had for the safety of life and property, and it had been customary for all those who could, to run away after harvest, till re-assured by advances of grain to sow with, and by specious promises of some better terms of rent.

28. AMANI.— For some time the district was under Amani, that is, the crop was grown and shared under the immediate supervision of the Revenue Officers, and the Government share was taken in kind. This arrangement was thought to place "the market at the command of Govern-

Jammahbundy Report of 1802.

"ment, so that no combination could be made
to undervalue the grain," but it was soon found

to encourage all kinds of peculation and fraud on the part of subordinates, and to throw half the grain in the country on the hands of Government, who could only sell at a loss. Much uncertainty was felt as to the best system to introduce in supersession of Amani. An assessment in money was absolutely necessary, but the Government had seen the impolicy of placing power in the hands of the Poligars, and were unwilling to add to the class of large landowners; while the villagers refused to rent their villages on the joint tenure system.

29. Thus Amani continued till 1807, when Mr. Hodgson represented that there was no longer any objection to rent out the district in large farms, as "the Government had established Courts of Justice, and the Poligars had been deprived of Civil and Criminal jurisdiction and power over the lives and services of their people;" and as to the alternative systems proposed, he thought that a village rent was impracticable, owing to the difficulty of disposing of the produce for money, and that ryotwary was altogether unsafe, as under a ryotwary rent "there was no demand for the labor of a ryot

That the ryot when left to himself "does extend his cultivation under a ryotwari tenure may be seen from the following Statement.

Cultivation of 1808.		Cultivation of 1868.
Description.	Acres.	Acres.
Wet	149,263	173,466
Dry	407,018	1,128,864
Total	556,280	1,302,330

"who cultivates only what he pleases, and the inducement for him to extend his cultivation must depend on the success of the past year."

30. TRIENNIAL LEASE.—The result was a sort of mixed system of rental, the villages being rented to the villagers, if they would take them, and if not, to Mootahdars, or large farmers, on 1808.

a triennial lease, the terms of which were fixed on the average assessment of the past six years; but the rents soon fell in arrears, and Amani was again reverted to.

31. DECENTNIAL LEASE.—A decennial lease was next tried, but with much the same result; for the commutation rate was fixed at a figure so dangerously near the selling price that it allowed no margin for an adverse state of the market; and as the market happened to be greatly depressed soon after this rate was fixed, the average price of grain throughout these 10 years was actually 11 per cent. below the commutation rate.

32. ULUNGU.—It was next proposed to reduce the term of the fixed commutation rate from 10 to 5 years, but the ryots refused to accept any rate for a longer period than one year. An annual valuation of the Government share of the produce was accordingly determined on, and this system, under the name of Ulungu, continued in force from 1822 till 1859.

33. Though the Ulungu system was simple in practice, it is somewhat difficult of explanation. The prices of grain during 9 years of the Decennial Lease were collected to form an average,

Equivalent to 9 Anna 6 Pice per Harris culum.

and after striking out the prices of the two

highest years, and one lowest year, and after

making some discretionary remissions, the average of the remainder was fixed on as the Ulungu standard. This amounted to Rupees 2-11-4½ per grain cottah, for both Kar and Peshanam, and the commutation rate of each subsequent year was adjusted with reference to this standard as under.

The average price of November, December and January for Kar, and of March and April for Peshanam, was compared with the standard for each group of villages, affected by any particular market. Thus if the average selling price

The Ulungu standard of price was thus modified to suit each separate group, and it varied from Rupees 2-1-11 to Rupees 3-9-8 per seed cottah, according to locality.

of the current year was more than 10 per cent in excess of the Ulungu standard, 10 per cent. of the standard was struck off the average selling price, and the remainder was adopted as the commutation rate for that year. If the average selling price was within 10 per cent. above, or 5. per cent. below the standard, the standard itself was adopted; but if the average selling price was more than 5 per cent. below the standard, 5 per cent. of the standard was added to the selling price as the commutation rate for that year.

34. FIELD ASSESSMENT.—For some time it was left to the people to settle among themselves the proportion of assessment to be borne by each field, but in 1825, the Board ordered the introduction of a field assessment. This was to be effectuated in theory by a valuation of all the lands in the district with reference to situation, irrigation, etc., but it resulted in practice in a mere arbitrary distribution of money rates in only 15 villages.

These rates were too numerous, and were imposed without much reference to the soil, or the real capabilities of the fields. The subject however gave rise to a long correspondence, but the result was insignificant, and nothing was done after Mr. Kindersley quitted the district.

35. The original standard of yield (to which the Ulungu commutation rate was applied) was

Board's Proceedings No. 1,548, dated 6th May 1857.

Had Ulungu continued till now, the revenue drawn from this district would have been out of all proportion to that drawn from neighbouring districts. It would have doubled, and trebled on the same area, within a very few years, and the district instead of progressing, as it has done under a different system, must have retrograded till only the very best lands remained in cultivation.

rise rapidly, as they have risen of late years, the Ulungu system broke down, and a change became a necessity.

probably much under-rated, as it was based on data collected when the district was under Amani, and when it was much to the interest both of the ryots and subordinate revenue officers to return the yield at as low a figure as possible. The Ulungu system therefore was not felt to be very oppressive, while prices were low and tolerably steady always; but when prices began to

36. MOTAFYAL.—The change effected was merely applying the standard Ulungu price to the fixed standard yield of each village as a permanent commutation rate. This is known as Motafyal, or lump assessment, and by it, in theory all lands are charged alike. In practice, however, the lands are occasionally charged with some regard to circumstances, the assessment being on the Poravu or area under any particular tank or channel; or on the chey or block; or on the average of the lease or puttah. These deviations from the system are virtually attempts to obviate the injustice of applying the same rate to good and bad land alike, but they have only partial success, and are restricted to certain localities, and it is not till a settlement based on the productive qualities of soil is introduced, that the inferior lands will be treated with due regard to the circumstances that cause their inferiority.

37. DRY LAND ASSESSMENT.—The dry lands were originally assessed by Mr. Lushington in

The Chain is equivalent to 3.64 acres.

Jammahbundy Report of Fusly 1235.

1802, by fixing on each chain of land a percentage proportion of the total dry land assessment of the village. This assessment was better

apportioned soon after by a rough survey and classification of the fields, and on the expiration of the decennial lease a comparison was made "with the former accounts, and the proportion which "they showed the cultivation of the higher classes of land to have borne to the whole extent of the "village, was entered in the Jummahbundy of that village as the cultivated area of those classes "of land, for that Fusly, without any actual examination of the land." This was, as the Collector acknowledges, a somewhat arbitrary proceeding, but it was accepted by the ryots without objection, as their dry land assessment had never been high, and a very large percentage of area was classed in the lower tarams. No changes have been made since then, and the dry land assessment still continues low, though the system under which it is charged is confused and in an unsatisfactory state.

38. The foregoing paragraphs contain a general description of the district, and its past revenue history, but the various processes by which the settlement is arrived at, have yet to be explained. These are:—

- 1.—The classification or division of the soil into classes.
- 2.—Ascertaining the produce of each of these classes.
- 3.—The conversion of the produce into money.
- 4.—The deduction of cultivation expenses from the money values.
- 5.—The adoption of half the remainder as a standard scale of assessment.
- 6.—The modification of this standard scale to groups of villages, formed according to relative advantages of irrigation, situation, etc.

39. CLASSIFICATION.—The tables used in Trichinopoly and Salem have been considerably altered to suit the requirements of the irrigated lands of this district, for though the same number of tarams of classes finally appears in the table, the number of grades of distinction made use of in valuing soils in the field are more numerous, and the classification has been made with a greater degree of nicety than was ever before attained. Particulars of the change in the table were put before the Board with my letter of 6th November last, but as the Board deferred all comment till acquainted with the results, I will merely repeat my explanation, and remark that I have had the new table in use for a year, and have found it to answer perfectly. The principal difference be-

* Black clay.
,, Loam.
,, Sand.
Red Loam.
,, Sand.

tween it and the old table is the division of the*
5 soils into 5 sorts each, instead of into three.
There are thus 25 varieties of soil, instead of
15 as formerly, but many of these yield alike,
and all are finally merged in 7 tarams or classes.

Excluding on both sides the "permanently improved series"

The relative valuation of soils is far more per-

fectly arranged in the new table than in the old, and slight differences of fertility of soil in the same class are dealt with, without making those marked distinctions in assessment that were unavoidable formerly. How this is managed, may be seen by a glance at the table, in which the first class comprises the best black loam alone, the second class the best red loam with the second sort

of black loam, and the third class the best sort of black clay, black sand and red sand with the second sort of red loam and the third sort of black loam. The best sorts of all the soils (with the second and third of one, and the second sort of another) thus form the first three classes, and the inferior sorts are all exhausted in the course of four classes more.

40. Experience has shown that classification by tracts is infinitely preferable to classification by fields, and the introduction of the former system here has met with the Board's approval.
Proceedings No. 7,723, dated 25th October 1866.

The former table did not provide for the nice distinctions requisite to classify by tracts. There was too great a difference in the values assigned to the various sorts of the same class. Loam is the soil most commonly met with under irrigation, and the wide separation of ordinary and inferior loams in the old table, occasioned too marked a difference in the assessment of fields that perhaps only slightly varied from each other in fertility, situation, irrigation, etc. Thus the assessment of

4.2.

an acre of ordinary black loam, at the standard rates in Trichinopoly was 6 Rupees, while the assessment of an acre of somewhat similar soil which from any of the causes above mentioned was less favourably circumstanced, and so styled inferior

4.3.

black loam, was only 3 Rupees, there being no medium between. As may be supposed there was not a difference of 50 per cent in the circumstances of two fields thus classified, and a variation of a Rupee an acre in some cases would have sufficiently marked the difference. The new table supplies intermediate grades, and so provides for the best, good, ordinary, inferior and worst sorts of soil, instead of for good, ordinary and worst only.

41. The classification of dry lands is simple. The area irrigated by small rain-fed tanks, or by baling from channels is classed as "best permanently improved" 2.1, and that watered by baling from wells as "ordinary permanently improved" 2.2. The wells are few in number, and are but little used, as labour is scarce in the valley. There are no black alluvial dry lands scattered among the rice fields, as in Trichinopoly, nor any rich red loams in the hollows, as in Salem, the bulk of the dry lands being gravelly sides of the valley which are so uniformly poor and barren, that one rate of assessment might be applied to all. I have however picked out the better lands here and there, and for the sake of uniformity have divided the soil into five sorts each, as was done for the irrigated lands.

42. The Classification table is given below.

Wet.				Dry.			
Soil.	Classification.		Assessment class.	Soil.	Classification.		Assessment class.
	Class.	Sort.			Class.	Sort.	
Best black loam	4	1	1	Best permanently improved ...	2	1	1
				Ordinary permanently improved..	2	2	2

Soil.	Wet.		Dry.	
	Classification. Class. Soil.	Assessment class. Sort.	Classification. Class. Soil.	Assessment class. Sort.
Good black loam ...	4	2	Best black loam...	4
Best red loam ...	7	1	Best black clay ...	3
Best black clay ...	3	1	Good black loam ...	4
Ordinary black loam ...	4	3	Best red loam ...	7
Best black sand ...	5	1	Good black clay ...	3
Good red loam ...	7	2	Ordinary black loam ...	4
Best red sand ...	8	1	Best black sand ...	5
Good black clay ...	3	2	Good red loam ...	7
Inferior black loam ...	4	4	Best red sand ...	8
Good black sand ...	5	2	Ordinary black clay ...	3
Ordinary red loam ...	7	3	Inferior black loam ...	4
Good red sand ...	8	2	Good black sand ...	5
Ordinary black clay ...	3	3	Ordinary red loam ...	7
Worst black loam ...	4	5	Good red sand ...	8
Ordinary black sand ...	5	3	Inferior black clay ...	3
Inferior red loam ...	7	4	Worst black loam ...	4
Ordinary red sand ...	8	3	Ordinary black sand ...	5
Inferior black clay ...	3	4	Inferior red loam ...	7
Inferior black sand ...	5	4	Ordinary red sand ...	8
Worst red loam ...	7	5	Worst black clay ...	3
Inferior red sand ...	8	4	Inferior black sand ...	5
Worst black clay ...	3	5	Worst red loam ...	7
Worst black sand ...	5	5	Inferior red sand ...	8
Worst red sand ...	8	5	Worst black sand ...	5

43. I have been able to classify the Tenkasi, Ambasamudrum and Tenkarei Talooks myself, and to supervise field work generally in the Tinnevelly Talook. Mr. Symonds classified the Nan-guneri Talook. No field work was ever done more carefully, or accurately, or more completely under the eye of the European Officers. No opening was left for fraud; all doubtful points were discussed and settled on the ground, and there are very few villages that need be looked at again before Settlement.

The results are given below.

Soil.	Classification.		Area.	Single crop Assessment.	Percentage.
	Class.	Sort.			
Best black loam ...	4	1	23,073	193,872	23
Good black loam ...	4	2	20,341	142,099	
Best red loam ...	7	1	6,278	41,036	
			26,619	183,135	27
Best black clay ...	3	1	228	1,436	
Ordinary black loam ...	4	3	10,475	57,005	
Good red loam ...	7	2	9,823	54,705	
Best red sand ...	8	1	728	3,830	
Best black sand ...	5	1	2,065	12,298	
			23,319	129,274	23

Soil.	Classification.		Assessment class.	Area.	Single crop assessment.	Percentage
	Class.	Sort.				
Good black clay ...	3	2		211	922	
Inferior black loam ...	4	4		3,673	14,385	
Ordinary red loam ...	7	3		10,503	45,381	
Good red sand ...	8	2		2,720	11,386	
Good black sand ...	5	2		871	3,728	
			4	17,978	75,802	18
Ordinary black clay ...	3	3		13	65	
Worst black loam ...	4	5		2,247	7,802	
Inferior red loam ...	7	4		3,875	14,424	
Ordinary red sand ...	8	3		1,672	5,858	
Ordinary black sand ...	5	3		60	180	
			5	7,867	28,329	8
Worst red loam ...	7	5		371	1,224	
Inferior red sand ...	8	4		69	207	
			6	440	1,431	½
Worst black sand ...	5	5		44	88	
Worst red sand ...	8	5		532	1,619	
			7	576	1,707	½
				99,872	613,550	100

44. The high standard attained by this classification is unparalleled in any district. 73 per cent. of the irrigated area falls in the first 3 classes; 18 per cent. in the fourth, 8 per cent. in the 5th, and only one per cent. in the two last classes. The reverse is the case with the dry lands. 3 per cent. of the entire area is classed as permanently improved in the first 2 classes, and this includes the lands under small rain-fed tanks transferred to the head of dry. Of the remaining bona fide dry land I have picked out the best patches for the higher classes, but there is only 28 per cent. that falls between the third and seventh classes inclusive, while 19 per cent. is in the 8th class, and 50 per cent. in the last class.

45. GROSS PRODUCE.—256 experiments have been made to test the yield of irrigated lands. These experiments have all been made in Peshanum, which I have accepted as the first crop, in preference to Kar, though the yield of the latter is larger; for Peshanum is the staple every where, from Madras to Cape Comorin, and is the crop in single crop lands; whereas Kar is only grown in those lands that have water sufficiently for two crops. These 256 experiments were conducted by European Officers, Talook Tahsildars and others, and consisted of reaping and threshing $\frac{1}{2}$ of an acre in every case. The tendency as usual has been to test the yield of the better, rather than that of the inferior lands; but this could hardly be helped, for the river valley consists mainly of black and red loam much above

*The 5 months' crop sown in October and reaped in February.

The 3 months' crop sown in June and reaped in September.

97 experiments were made in the best black loam, 63 experiments in good black loam, 2 experiments in ordinary black loam and 19 experiments in inferior black loam. 20 experiments were made in the best red loam, 16 experiments in good red loam, and 20 experiments in ordinary red loam, leaving only 17 experiments made in the inferior soils.

the average, and there is only a small percentage of area classed as inferior soil. It is, moreover, of the

first importance in making a settlement to ascertain the relative values of the superior soils, as the yield of the others can easily be adjusted to these.

Proportion of area of inferior soils, 10 per cent.
Proportion of experiments made in these soils, 7 per cent

In this district though, we have a fair proportion of experiments made in inferior soils, and the result throughout is satisfactory.

46. The ryots have been consulted in all the talooks, and though unaccustomed to draw fine distinctions they have their valuation of good, ordinary and indifferent soils. Thus they state the yield of a good crop of paddy to be 52 cullums in best black loam : our experiments make it 47 cullums. I have, therefore, fixed 50 cullums as the settlement standard. The ryots pass over

The ryots give their figures in cottahs, the local grain measure here, but I have shown the equivalent in Harris cullums to admit of comparison with other districts. The Harris cullum contains 24 Madras measures and 4½ cullums go to the cottah.

the intermediate grade, and give 38 cullums as the average yield of ordinary black loam. Our experiments make it 41 cullums, and I have fixed 40 cullums as the settlement standard. Halving the difference between the value assigned to best and ordinary, gives 45 cullums for good black loam, which is ascertained by experiments to yield 44 cullums. I have, therefore, fixed 45 cullums as the settlement standard. The ryots value the worst black loam at 28 cullums: our experiments give 28 cullums. I have fixed the settlement standard at 30 cullums. Halving the difference between the value assigned by the ryots to ordinary and worst black loam gives 33 cullums for inferior black loam: our experiments make it 34 cullums, and I have fixed 35 cullums as the settlement standard. Black clay is seldom found in the river valley, and it is sufficient to mention here that the best sort is valued with ordinary black loam at 40 cullums. Black sand is found more frequently; the ryots value the best sort at 38 cullums. Our experiments make it 41 cullums, and I have fixed 40 cullums as the settlement standard. No experiments were made in good and ordinary black sand, but the ryots value the latter at 27 cullums, and I have taken 30 cullums as the settlement standard. Halving the difference between the ryots' valuation of best and ordinary, gives 32½ cullums as the value of good black sand, and I have taken 35 cullums as the settlement standard. Inferior and worst black sands are hardly found, but are valued at 25 and 20 cullums respectively. In like manner with the red series, the best red loam is not rightly understood by the ryots who would rather class it in the black series, the surface having become nearly black by manure and cultivation, but good red loam they value at 38 cullums. Our experiments make it 41 cullums, and I have fixed the settlement standard at 40 cullums. Ordinary red loam they value at 31 cullums: our experiments make it 35 cullums, which I have fixed on as the settlement standard. The ryots pass over inferior red loam, and give 25 cullums as the value of the worst red loam. No experiments were made in this sort. I have accepted the ryots' valuation as the settlement standard. Halving the difference between the ryots' valuation of ordinary and worst, gives 29½ cullums for inferior red loam. Our experiments make it 31 cullums, and I have fixed on 30 cullums as the settlement standard. In red sand the ryots value best red sand at 37 cullums. Our experiments make it 42 cullums, and I have fixed the settlement standard at 40 cullums. The ryots pass over good red sand, and give 27 cullums as the value of ordinary red sand. No experiments were made in this sort, but I have fixed 30 cullums as the settlement standard. Halving the difference between the ryots' valuation of best and ordinary, gives 32 cullums for good red sand. Our experiments make it 35 cullums, and this I have fixed as the settlement standard. Inferior and worst red sand scarcely exist in the river valley, but they were nominally valued at 25 and 20 cullums respectively.

47. The following Statement exhibits these figures in juxtaposition.

Soil.	Yield as estimated by the ryots in Harris cullums.	Yield as per experiments of produce in Harris cullums.	Settlement valuation in Harris cullums.
Best black loam...	52	47	50
Good black loam	0	44	45
Ordinary black loam	38	41	40
Inferior black loam	0	34	35
Worst black loam ...	28	28	30
Best black clay ...	38	42	40
Good black clay ...	0	0	35

Soil.	Yield as estimated by the ryots in Harris cullums.	Yield as per experiment of produce in Harris cullums.	Settlement valuation in Harris cullums.
Ordinary black clay ...	31	0	30
Inferior black clay ...	0	0	25
Worst black clay ...	19	0	20
Best black sand ...	38	41	40
Good black sand ...	0	0	35
Ordinary black sand ...	27	0	30
Inferior black sand ...	0	0	25
Worst black sand ...	18	0	20
Best red loam ...	0	46	45
Good red loam ...	38	41	40
Ordinary red loam ...	34	35	35
Inferior red loam ...	0	31	30
Worst red loam ...	25	0	25
Best red sand ...	37	42	40
Good red sand ...	0	35	35
Ordinary red sand ...	27	0	30
Inferior red sand ...	0	0	25
Worst red sand ...	17	0	20
Average ...	31	39	33

48. The standard measurement of area is the seed cottah, and this takes one cottah of grain to sow. The cottah is divided into 21 mercals of

The equivalent of 1.62 acres.
The equivalent of 168 seers or quarts or 5½ bushels.

cultural requirements on the cottah and mercal. Thus a full crop is 21 cottahs, or 21 times the seed sown; the yield of straw is a double bundle per mercal, or 42 bundles per cottah, and the land requires a bandy load of manure for each mercal, or 21 loads per cottah. Again, the rental of land is often 21 cottahs, per cottah, (first and second crop inclusive), but all these calculations are based on a maximum standard, for the best lands only, and vary in proportion to the circumstances of the inferior lands. There are certain very poor lands that yield as little as six fold, but such are rare, the average yield under river-irrigation being acknowledged to be twelve fold, and this I find to have been its valuation by Mr. J. Cochrane in 1805. 12 fold is 2016 seers or 1320 Madras measures or 55 Harris cullums per cottah, equivalent to 34 Harris cullums per acre. This is 3 cullums more than the average of the ryots' estimates, and one cullum more than the average arrived at by the settlement processes.

49. In 1866, Mr. Banbury made 179 experiments in the yield of Peshanam paddy, but the result he arrived at was beyond all reason excessive, as he assumed the average yield of the 5 river-irrigated talooks to be 18 fold, or 1194 Madras measures an acre. I doubt if any large tract of country in India ever yielded such an average, and here I feel sure that the average is not very much above 12 fold, 744 Madras measures according to the ryots' estimate, and 792 measures according to the settlement processes. What is called a full crop in the best land is 21 fold, though there are lands which high farming will make to yield 25 fold, but these are very exceptional, and are farmed at a cost far beyond my allowance for cultivation expenses. Mr. Banbury's calculations are no doubt excessive throughout,

At the time Mr. Banbury wrote there was great scarcity in the northern talooks, and hundreds of carts laden with grain and straw were travelling northwards daily. for besides assuming the average yield to be within 6 measures an acre of the 1200 measures

I have fixed on here as the maximum, and which Mr. Master thought "to be the highest grain value that it was prudent to fix for the Godaverry," a district richer than Tinnevelly, even in minor matters, his calculations are far in excess of mine. For instance he estimates each mercal

of land to yield 3 bundles of straw worth 3 annas a bundle, and so to pay its assessment by straw alone; whereas, in reality, a mercal of land yields but two bundles of straw, and these are not worth more than two annas each on the threshing floor. Straw is high priced near a town, and will no doubt pay the assessment of some lands, but there are places where straw is not saleable and my estimate of 2 Annas a bundle or 5½ Rupees for the straw grown on each cottah of land is quite high enough for an average.

50. I am fully satisfied with the fairness and approximate accuracy of my estimate of yield throughout, and feel sure that it cannot be safely increased. It averages 792 Madras measures an acre, whereas in Trichinopoly it was 648 and in the lower talooks of Salem 612 measures an acre

Soil.	Estimate of the yield of irrigated land in		
	Trichinopoly.	Salem.	Tinnevelly.
Best permanently improved	Harris cullums. 45	Harris cullums. 45	Harris cullums. ...
Ordinary permanently improved	40	40	...
Best black loam	40	40	50
Good black loam.....	...	...	45
Ordinary black loam	35	35	40
Inferior black loam.....	...	...	35
Worst black loam	24	15	30
Best black clay	35	30	40
Good black clay .....	...	...	35
Ordinary black clay	30	25	30
Inferior black clay.....	...	...	25
Worst black clay	18	12	20
Best black sand	30	30	40
Good black sand .....	...	...	35
Ordinary black sand	25	25	30
Inferior black sand.....	...	...	25
Worst black sand	18	15	20
Best red loam.....	30	35	45
Good red loam.....	...	...	40
Ordinary red loam	23	30	35
Inferior red loam .....	...	...	30
Worst red loam	13	15	25
Best red sand	23	30	40
Good red sand .....	...	...	35
Ordinary red sand	18	20	30
Inferior red sand .....	...	...	25
Worst red sand	13	12	20
Average...	27	26½	33

51. No experiments worth recording were made in dry land, for no staple crops are grown on the dry lands of the river valley, but merely Samei and Gram, and not very much of these. Half of the area held on puttah is never cultivated at all, and the other half is only ploughed once in two, three, or four years. With such soil to deal with, it would be a mere farce to go through the Settlement processes, and work out data for a table of rates, when sufficient data have been already worked out three times over for Trichinopoly, and for the upper and lower talooks of Salem. The rates already accepted in any one of these districts are quite sufficient for practical purposes, and if we apply the rates for the inferior and worst soil in Salem, we shall assess 68 per cent. of the dry lands here at 6 and 4 Annas an acre.

52. COMMUTATION RATES.—The price of grain has been recorded for nearly 100 years in this district, and there is only a break of three years in the series of Price Lists from 1770 to 1868.

The figures obtainable are thus fully sufficient for all purposes of calculation, and admit of averages being struck on several series of years.

				Average during each period of 10 years.																																							
	RS.	A.	P.	1771 to 1780			1781 to 1790			1791 to 1800			1801 to 1810			1811 to 1820			1821 to 1830			1831 to 1840			1841 to 1850			1851 to 1860			1861 to 1868												
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.													
Average per Harris cullum of 24 Madras measures during 30 years of the last century.	0	12	9	{ 1771 to 1780	0	9	4	{ 1781 to 1790	0	12	8	{ 1791 to 1800	0	13	4	{ 1801 to 1810	0	11	6	{ 1811 to 1820	0	12	11	{ 1821 to 1830	0	10	8	{ 1831 to 1840	0	10	8	{ 1841 to 1850	0	10	3	{ 1851 to 1860	1	0	3	{ 1861 to 1868	1	11	5
During the past 30 years of the present century.	0	11	9																																								
During the last 38 years of the present century.	0	14	10																																								
Total for the whole period...	0	13	5																																								

53. On comparing the averages it will be seen that the prices were an Anna a cullum higher during the last 30 years of the last century, than during the first 30 years of this century, and 2 Annas a cullum lower than during the last 38 years of this century; with such very even averages, it is quite fair to take an average of the whole, and I have based my calculations accordingly on the total average of 13 Annas 5 pies a cullum. These figures are the town selling prices collected from the periodical Returns and Price Currents submitted by the Talook officials and by all the large dealers in grain. Since I have been in this district, I have found the ryots' selling prices to be usually a rupee a cottah less than the retail price in the towns, and as paddy is now selling at seven Rupees a cottah in Tinnevelly, a rupee abatement on this is equivalent to 14 per cent. and 13 Annas 5 pies a cullum minus 14 per cent. is very nearly what I propose.

54. A cart will convey 4 cottahs at 2 Annas a mile. The cost of cartage is thus 1 Anna 1 pie a cullum for 10 miles, the average distance of 21 bushels weighing 1,093 lbs. or nearly half a ton. The seer of paddy weighs 1 lb. 10 oz.

the villages from a market town. Merchants' profits, at 7½ per cent. amount to an anna more, and throwing off the remaining 4 pies for wastage, the 13 annas 5 pies are reduced to 11 Annas, at which rate I propose to convert the grain into money. This is undoubtedly high, 16 per cent. higher than the Ulungu standard rate of 9 Annas 6 pies a cullum, under which the district has flourished for nine years, and were it to be applied indiscriminately to good and bad lands alike, on the Motafysal system at present in force, the district must suffer by it. It is, therefore, only in consideration of the allowance to be made by the settlement for cultivation expenses and unprofitable areas, and by grouping the inferior villages, that I am emboldened to propose a rate that may some day possibly be in excess of the market price.

55. Eleven annas a cullum is 92 Rupees a garce, and considerably higher rate than any proposed for any district south of Madras. In Trichinopoly it was Rupees 66-10-8, in South Arcot Rupees 71-12-8, in the upper talooks of

Salem Rupees 75, and in the lower talooks Rupees 83-5-4 per garce. Tinnevelly is better off no doubt than any one of these districts, but at the same time it is higher assessed and its prosperity is mainly owing to a river that never fails, and to cotton fields that produce the staple so much in demand just now.

56. Though the assessment is paid with ease, the system under which it is levied is excessively rough and imperfect, and a very few years of low prices would throw out of cultivation nearly all the inferior lands. Prices fell last year from 13½ Rupees to 4½ Rupees a cottah, and had they declined, as expected, another Rupee, or to about a pagoda a cottah, they would have almost touched the rate which I propose to adopt for this district.

Rupees 3-2-5 a cottah.

57. Mr. Master recently showed how likely it was that the commutation rate for the Godavery would have been reached two years ago had it not been for scarcity elsewhere, and the Godavery rate is 72 Rupees a garce, or 20 Rs. less than the rate I propose here. But as before explained, it is the mode of applying the assessment to the lands that makes the new settlement easy, and prevents it from being oppressive even when prices fall.

58. The following table shows the money value of the yield of each description of soil.

Soil.	ESTIMATED YIELD.		Value at 11 annas a cullum.	
	In Madras measures.	In Harris cullums.		
Best black loam ...	1,200	50	Rs.	As.
Good black loam...	1,080	45	34	6
Ordinary black loam ...	960	40	30	15
Inferior black loam....	840	35	27	8
Worst black loam...	720	30	24	1
Best black clay ...	960	40	20	10
Good black clay ...	840	35	27	8
Ordinary black clay ...	720	30	24	1
Inferior black clay...	600	25	20	10
Worst black clay...	480	20	17	3
Best black sand ...	960	40	13	12
Good black sand .	840	35	27	8
Ordinary black sand ...	720	30	24	1
Inferior black sand ...	600	25	20	10
Worst black sand...	480	20	17	3
Best red loam.....	1,080	45	13	12
Good red loam ...	960	40	30	15
Ordinary red loam....	840	35	27	8
Inferior red loam...	720	30	24	1
Worst red loam ...	600	25	20	10
Best red sand... ..	960	40	17	3
Good red sand ...	840	35	27	8
Ordinary red sand...	720	30	24	1
Inferior red sand...	600	25	20	10
Worst red sand ...	480	20	17	3
Average... ...	792	33	13	12
			22	11

59. CULTIVATION EXPENSES.—The usual practice in the Carnatic is either to sow rice in seed beds so as to have the plants ready to put out directly the country is flooded, or to sow broadcast on ground ploughed after it has been flooded. Planting out saves time, perhaps six weeks, a great consideration in the case of double crop land, but sowing in the water is less expensive and answers sufficiently well for single crop land.

60. Planting and sowing, as above, are both practised in Tinnevelly, but the more usual treatment of light soil for the Kar crop is to sow the seed *dry* under these channels that can be depended on to furnish a water supply on a certain day every year. The ground is first well ploughed and highly manured, and then smoothed and pulverized till the surface is as fine as a garden bed. The seed is sown on this dry surface, and the fields are green some weeks before they get a drop of water. The stiffer soils and higher levels cannot be treated thus, but are sown or planted in the ordinary manner; but however rice is grown in Tinnevelly, whether planted or sown, in wet or dry soil, the quantity of seed used is enormous, and manure is applied with a liberality unknown in other districts.

61. The seed for an acre at the commutation rate arrived at above is worth 1 Rupee, 15 Annas, 3 Pies. The ploughing may be set off against the straw. Manure is a heavy item. 12 bandy loads of ashes and sweepings at 5 Annas a bandy, and one bandy load of leaves and weeds from the jungle at 3 Rupees 4 Annas, total 7 Rupees, is no unusual allowance for an acre of the best land. In the Cauvery districts manure is not used at all, as the river brings down silt sufficient, but here the water is pure and clear in the upper channels after the heaviest rains, and there is hardly any sediment. Sowing is a simple process, and need not be taken into account. Weeding is more important, and must be repeated twice. 14 women at 2 Annas each cost 1 Rupee 12 Annas. Reaping is usually performed on contract, half a cottah of grain, or 55 Madras measures being given for reaping an acre. This at 11 Annas a cullum is worth 1 Rupee, 9 Annas 3 Pies. Threshing, or rather treading out the grain by cattle, is also done on contract at the rate of 30 Madras measures per acre. 30 measures are worth 13 Annas 9 Pies; stacking, carrying, kaval fees, etc., cost another 30 measures, worth 13 Annas 9 Pies; total cost of cultivating an acre of the best land Rupees 14, and proportionately less for inferior lands, which notably get less manure. The items are as under.

	RS.	A.	P.
Seed.....	1	15	3
Manure.....	7	0	0
Weeding.....	1	12	0
Reaping	1	9	3
Threshing.....	0	13	9
Stacking, etc.....	0	13	9
Total.....	14	0	0

62.—NET PRODUCE.—Deducting cultivation expenses from the value of the yield gives the net produce as under.

Soil.	Yield in Harris cullums.	Value at 11 annas a cul-lum.		Deduct culti-vation ex-penses.		Value of the net produce.	
		RS.	A.	RS.	A.	RS.	A.
Best black loam ...	50	34	6	14	0	20	6
Good black loam...	45	30	15	13	0	17	15
Ordinary black loam ...	40	27	8	12	0	15	8
Inferior black loam ...	35	24	1	11	0	13	1
Worst black loam...	30	20	10	10	0	10	10
Best black clay ...	40	27	8	12	0	15	8
Good black clay ...	35	24	1	11	0	13	1
Ordinary black clay ...	30	20	10	10	0	10	10
Inferior black clay...	25	17	3	■	0	9	3
Worst black clay...	20	13	12	6	0	7	12
Best black sand ...	40	27	8	12	0	15	8
Good black sand ...	35	24	1	11	0	13	1
Ordinary black sand ...	30	20	10	10	0	10	10
Inferior black sand ...	25	17	3	8	0	■	3
Worst black sand ..	20	13	12	6	0	7	12
Best red loam ...	45	30	15	13	0	17	15
Good red loam ...	40	27	8	12	0	15	■
Ordinary red loam ...	35	24	1	11	0	13	1
Inferior red loam...	30	20	10	10	0	10	10
Worst red loam ...	25	17	3	8	0	9	3
Best red sand ...	40	27	8	12	0	15	8
Good red sand ...	35	24	1	11	0	13	1
Ordinary red sand...	30	20	10	10	0	10	10
Inferior red sand...	25	17	3	8	0	9	3
Worst red sand ...	20	13	12	6	0	7	12

63. STANDARD RATES OF ASSESSMENT.—Half of this net produce is taken as the Government share, after deducting 10 per cent. for unprofitable areas now measured into fields by the survey, and which have never been charged for before. 10 per cent. was allowed elsewhere, and there is no reason for altering the proportion sanctioned for other districts. Thus the standard rates of assessment represent in round figures half the net produce diminished by 10 per cent.

Soil.	Value of half net pro- duce.			Deduct 10 per cent.			Remainder.			Standard rates of as- essment.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Best black loam...	10	3	0	1	0	4	9	2	8	9	0	0
Good black loam	8	15	6	0	14	4	8	1	2	8	0	0
Ordinary black loam	7	12	0	0	12	5	6	15	7	7	0	0
Inferior black loam	6	8	6	0	10	5	5	14	1	6	0	0
Worst black loam	5	5	0	0	8	6	4	12	6	5	0	0
Best black clay...	7	12	0	0	12	5	6	15	7	7	0	0
Good black clay...	6	8	6	0	10	5	5	14	1	6	0	0
Ordinary black clay	5	5	0	0	8	6	4	12	6	5	0	0
Inferior black clay	4	9	6	0	7	4	4	2	2	4	0	0
Worst black clay	3	14	0	0	6	2	3	7	10	3	8	0
Best black sand...	7	12	0	0	12	5	6	15	7	7	0	0
Good black sand...	6	8	6	0	10	5	5	14	1	6	0	0
Ordinary black sand	5	5	0	0	8	6	4	12	6	5	0	0
Inferior black sand	4	9	6	0	7	4	4	2	2	4	0	0
Worst black sand	3	14	0	0	6	2	3	7	10	3	8	0
Best red loam ...	8	15	6	0	14	4	8	1	2	8	0	0
Good red loam ...	7	12	0	0	12	5	6	15	7	7	0	0
Ordinary red loam	6	8	6	0	10	5	5	14	1	6	0	0
Inferior red loam	5	5	0	0	8	6	4	12	6	5	0	0
Worst red loam ...	4	9	6	0	7	4	4	2	2	4	0	0
Best red sand ...	7	12	0	0	12	5	6	15	7	7	0	0
Good red sand ...	6	8	6	0	10	5	5	14	1	6	0	0
Ordinary red sand	5	5	0	0	8	6	4	12	6	5	0	0
Inferior red sand	4	9	6	0	7	4	4	2	2	4	0	0
Worst red sand ...	3	14	0	0	6	2	3	7	10	3	8	0

64. GROUPING OF VILLAGES.—As the foregoing estimates have been framed on a high standard of yield, some deduction is necessary for unfavourable seasons or failure of crop. The villages have, therefore, been formed into groups and the standard rates have been modified to suit the circumstances of those groups that are most likely to suffer from a deficiency of water supply. Thus, the full rates are applied to the best villages centrally situated and well-irrigated, but are slightly modified for the villages rather less favourably situated and less certain of irrigation, and are still further modified for the outlying villages at the end of the channels and along the foot of the hills.

65. 64 of the choicest villages form the first group ; 127 ordinary villages form the second group ; 131 outlying and inferior villages form the third group; and 19 very poor villages, some under the two worst channels in the district, and others near the sea, form the fourth group.
Manur and Pullikottai.

A.

B.

C.

D.

E.

F.

66. The details of each group are as follows. Commencing from the head of the valley, 10 outlying villages in the Tenkasi Talook irrigated by small streams and disadvantageously situated to the north of the Shenkottah territory are placed in the third group ; and 10 villages round the town of Tenkasi, south of the Shenkottah

G.
 H.
 I.
 J.
 K.
 Sangantiradu and Melakallur.
 L.
 M.
 Chuttrum-pudukolam.
 N.
 O.
 Taruvai.
 P.
 Q.
 R.
 S.
 Tadyur and Shenkolam.
 T.
 U.
 V
 W.
 X.

territory and well-irrigated, are placed in the second group. East of Tenkasi, 10 villages less freely irrigated and further away from the market, fall in the third group ; and 14 poor villages both in Tenkasi and Tinnevelly, under the Manur and Pullikottei channels which carry but little water, are placed in the fourth group. The remaining 9 villages on the Sittar, from Nettur inclusive to the mouth of the river, are placed in the third group. 15 villages at the foot of the hills in Ambasamudram, tolerably well-irrigated, but much exposed to the ravages of wild animals, are also placed in the third group ; while 14 others better situated along the main lines of road, and under the Varanadi and Gatana nadi rivers and the first two Anicuts in the Tamrapurni, are placed in the second group. 4 villages north east of these, round Papagudi, towards the end of the Gatana irrigation, are placed in the third group. From Ambasamudram to Sevval, 23 villages under the Nadiyuni and Canadiyan channels form the first group. These are well situated, well irrigated, and

highly cultivated. The outskirts of this group and all the villages east of Sevval to the end of the talook, 10 in all, are placed in the second group. The first two villages under the Kodagan channel, on the north bank of the river, are also placed in the second group ; and from these up to Tachaneellur, 23 villages under the Kodagankal and Sutamali channels are placed in the first group. 12 villages under the Sutamali channel and one under the Kodagan channel are placed in the second group ; and 5 villages at the end of the irrigation from the Sutamali Anicut are placed in the third group. South of the river, the most westerly village in the Tinnevelly Talook falls in the second group, and 19 villages under the Palayan channel, centrally situated near Palamcottah, are placed in the first group. From thence to the end of the talook, skirting the river, 12 villages under the Palayan and Marudur Melagal channels are placed in the second group ; and 7 villages at the end of the Palayan channel irrigation are placed in the third group, and 2 poor villages at the end of the Pachayar irrigation are also placed in the third group. In Tenkarei, 27 villages from Karungulam to Tentiriperi on one side, and from Valnad to Arumugamangalam on the other side of the river, are placed in the second group. 25 villages on the outskirts of these are placed in the third group, and 5 very poor villages near the sea are placed in the fourth group. In Nanguneri there are but two groups. 38 villages near the foot of the hills, well-irrigated and fairly situated, are placed in the second group, and 44 villages further from the source of irrigation are placed in the third group.

67. There is no grouping for dry lands, for all are poor alike, with the exception of a narrow belt at the foot of the hills that receives occasional showers from the south-west monsoon ; but what these lands gain in fertility they lose in position, so no distinction has been made in their favour.

68. To illustrate the effect of this grouping, an acre of the best black loam in Shermadevi will be charged 9 Rupees, and an acre of the same soil in Tenkasi 8 Rupees, in Sundrapandiyam 7 Rupees, and in Mayamankurichi 6 Rupees, these villages representing the first, second, third, and fourth groups respectively.

69. RATES OF ASSESSMENT ARRIVED AT.—The following are the rates arrived at:—

Taram or class.	Standard rates for the 1st group.	Modified rates for the 2nd group.	Modified rates for the 3rd group.	Modified rates for the 4th group.
	RS. A.	RS. A.	RS. A.	RS. A.
1	9 0	8 0	7 0	6 0
2	8 0	7 0	6 0	5 0
3	7 0	6 0	5 0	4 0
4	6 0	5 0	4 0	3 8
5	5 0	4 0	3 8	3 0
6	4 0	3 8	3 0	2 8
7	3 8	3 0	2 8	2 0

70. These rates when applied to the classified area show 10 per cent. of it to be charged 9 Rupees, 17 per cent. 8 Rupees, 15 per cent. 7 Rupees, 19 per cent 6 Rupees, 15 per cent. 5 Rupees, 15 per cent. 4 Rupees, and only 9 per cent. to be charged at less than 4 Rupees an acre, the average assessment for the 1st group being 8 Rupees 6 annas an acre, for the 2nd group six Rupees 11 Annas, for the third group four Rupees 11 Annas, and for the fourth group three Rupees nine Annas an acre, total average six Rupees two Annas an acre.

71. INCREASE OF AREA BY SURVEY.—These rates are, however, virtually increased by the increased area to be charged for. It is true that this increase of area is nothing considerable as compared with other districts, but it is still sufficient to add 92,789 Rupees to my Settlement. The increase is 10 per cent. or just about the area of the channels, banks, paths, etc., measured into fields by the survey. A large extent of concealed cultivation was brought to account in the Pymaish of 1802, and as the measuring rod since used was a trifle under its nominal length, as a natural consequence there is very little to bring to account now in villages that were fully cultivated at the time that the Pymaish was made. This additional 10 per cent., however, will raise the average to Rupees 9-3-0 for the first group, Rupees 7-6-0 for the second group, Rupees 5-3-0 for the third group, and Rupees 3-15-0 for the fourth group, and make the single crop average Rupees 6-12-0 an acre.

72. SECOND CROP.—This is the only district in the Presidency in which two full assessments are charged for two crops grown on the same land in one year. It is true that the full charge for the second crop only applies to the limited area classed as double crop in the original Cultivation Accounts, and that all other lands are charged but half assessment additional for a second crop, as is customary in other districts, but this limited area is so highly assessed, that settle it as we will, there must be a large loss of revenue. 34,595 acres, as per survey, are charged a double assessment, and 24,620 acres 1½ assessment. The second crop charge on the former amounts to 2,66,006 Rupees, and on the latter to Rupees 1,04,963. Total Rupees 3,70,969. In Trichinopoly the second crop was compounded for at $\frac{1}{2}$ and $\frac{1}{2}$ additional to the single crop assessment, and even if we double these rates for the first and second groups here, and charge $\frac{3}{2}$ and $\frac{1}{2}$ additional for the two higher groups, and $\frac{1}{2}$ and $\frac{1}{2}$ additional for the two lower groups, we shall still fail to account for 1,30,280 of the present assessment.

73. There is no reason whatever why the maximum of the present assessment should be twice that of other districts, or why the minimum should be equal to the maximum of other districts. It was quite accidental that the Ulungu system was introduced at all, and it was only because the Ulungu standard of yield was fixed on Kar and Peshanam separately, that two separate assessments were charged. Had there been no Ulungu, there would have been no full assessment for two crops, and it is very unfortunate for my Settlement scheme that this obstacle should stand in the way, and that for the sake of expediency I should have to deviate from what has been done elsewhere, and recommend rates that will some day contrast unfavorably with those of other districts, when the whole Presidency comes to be settled.

74. It is not, however, likely that the people will merely compound for what grows a second crop now. As in Trichinopoly, they will compound for a large area of single crop land on the chance of growing a second crop. There is much land that would grow a second crop of cholum or raggy when the water is insufficient for paddy, were not cultivation restricted by the present excessive assessment. Perhaps 20,000 acres will be thus compounded for, if charged $\frac{1}{2}$ in the two higher groups, and $\frac{1}{4}$ in the two lower groups. This will add 30,000 Rupees to the revenue, and will make the total reduction on second crop 1,02,080 Rupees.

75. RAIN-FED TANKS.—On either side of the river valley there are extensive tracts of high, dry, gravelly soil included in the limits of villages whose lower lands are irrigated from the river. These high lands are held on puttah, and are mostly used for grazing ground, though partially cultivated here and there. Small tanks have been constructed to irrigate 5, 10, 15, or 20 acres, but such irrigation is precarious, the tanks being dependent on falling rain, and seldom holding more than a few days water supply, while the area irrigated is invariably of the poorest description; but even with these disadvantages the assessment is usually the village average and is seldom much below it.

76. The Board have accorded a general assent to my proposal to assess such lands as dry, and to grant permission to the ryots to cultivate them as they like, with or without irrigation, on the understanding that Government will no longer keep up the tanks. The ryots will readily assent to this, and will improve the tanks, and sink wells under them, till what is now a poor barren soil will be turned into well kept gardens.

Board's Proceedings, dated 12th November 1866, No. 8,132.

77. There are 147 of these small tanks in 54 of the 345 villages now reported on. The aggregate area irrigated by these tanks is 1,658 acres assessed at 8,736 Rupees. This assessment will be reduced by settlement to 2,933, Rupees if the lands are classed as dry, and to very nearly the same figure, if the lands are classed as wet. Classing them as dry, however, has the advantage of getting rid of Maramut and constant demands for remission, and the relief thus afforded to Government will more than compensate for the loss of 2,933 Rupees of revenue which after all represents but an annual outlay on repairs, or remission of 20 Rupees a tank.

No. of rain-fed tanks irrigating less than 20 acres each.	Area irrigated as per Curnums' Accounts.	Assessment as per Curnums' Account.	Assessment as per settlement if classed as dry.	Reduction by settlement.
	Acres.	Rs.	Rs.	Rs.
147	1,658	8,736	5,803	2,933

78. PALMYRA TREES.—The Palmyras scattered about the fields are now charged for separately in addition to the assessment on the land. No tree is taxed till pruned and climbed, when it is charged as "leaf bearing" at $2\frac{1}{2}$ pies per annum. When tapped a few years later, it is charged 5 pies, if a male tree yielding only juice, or 10 pies, if a female tree yielding both fruit and juice. These are the usual rates, but they vary in some localities from a fraction of a pie to two Annas a tree. Any one who cuts down a tree without leave is liable to a fine of 20 years' assessment, but this rule is seldom enforced, as the Village Officers say nothing about trees being cut if gratified with a small fee for themselves. Every three years the trees are inspected, and the Curnum is required to prepare a fresh "pairedupu" or detailed account of them. This inspection is really nominal, as it is beyond human power to count the trees, class them, and decide whom they belong to, within the few weeks allowed for this purpose, just before the Jummahbundy, at the very time too when the Curnum is busily engaged in preparing his other accounts. I lately had occasion to prepare a correct account of the trees for two Zemin Villages, at the cost of some months of labour, and the account could only be prepared at all by demarking the ground in blocks,

and so sub-dividing the masses of trees ; but even when the trees are all counted and classed, the registration of ownership is as difficult as any part of the process. A man's trees may be scattered all over the village, and it does not follow that he owns a single foot of land in the village. Trees have been transferred by mortgage and sale apart from, and irrespective of the land they stand on, and the land-holders have very generally added to this complication by allowing the climbers a certain percentage of trees to keep the rest in order. Some change of system is needed, and when the settlement is introduced, the simplest expedient will be to allow of the redemption of tree tax at 20 years' purchase, and to tax the trees not thus redeemed at three uniform rates of 3, 6, and 12 pies each according to class. This would enable me to enter in the Settlement Register "tree tax redeemed" for a large percentage of the fields, and when once the tree tax is redeemed, the ryots may cut down the trees in their fields, or plant any number they like without any additional charge. They will naturally rather plant than cut, as palmyras are profitable, and will grow in the poorest soil. Those fields that have no trees on them now should also be entered as "tree tax redeemed," leaving it optional to the ryots to plant, and as there are many thousand acres of hard, gravelly soil, held on puttah, which are only fit to grow palmyras, it is probable that planting will be carried on on a large scale, and that the country will be greatly benefited by the protection thus afforded from the wind, which now blows the very soil off the uplands during the prevalence of the South-west monsoon. Much of the cultivated area will thus be freed from tree tax, but there will still remain some trees in cultivated fields that do not belong to the land-holder, and a very large number on tank banks, road-sides etc., which cannot be sold, but may be taxed at uniform rates. The land-holder and tree-holder are unlikely to come to terms, and so cannot redeem the tax, while the sale of trees on tank banks or road-sides would interfere with repairs and might be inconvenient.

79. I have worked out this scheme of purchase for each field in the Tenkasi Talook with the following results.

No. of fields containing palmyras held by the land-holder.	Cumrums' area of these fields in acres.	Land-tax of these fields in Rupees.	No. of palmyras in these fields.	Tax of these trees in Rupees.	Amount for which the Tree-tax can be redeemed at 20 years purchase in Rupees.	Average cost of redemption per tree.
2,882	9,715	8,276	1,68,074	3,490-3-6	69,803-2-0	0—6—9

80. The other talooks are merely estimated for, as it takes a long time to procure details for every field, but the estimate is pretty accurate. There are 1,899,940 palmyras in the river valley, assessed at 41,568 Rupees. One half of this assessment, say 20,000 Rupees, is likely to be redeemed for 4 lacs of Rupees, and the other half is capable of being raised very considerably by the introduction of uniform rates, and by the abolition of tree Cowle, Chatturbagam, Paller maniyam etc., at settlement.

81. SAMUDAYAM OR COMMON LANDS.—No less than 209 villages in the river valley contain samudayam, or land held in common by shareholders. Formerly all lands in these villages were

Jummahbundy Report of 1802.

thus held, and in the earliest report on this district, it is mentioned that "the greater part of the

" cultivators of the fertile villages on the banks of the Tamrapurni were at one time driven out "to make room for colonies of Brahmins." The Visabadi system of the north was then introduced, and for some time these colonists were contented to live as one family, sharing the produce in common. Precautions were adopted to prevent any shareholder from claiming any land as his own, by obliging each man to occupy good and bad land in turn. As might be expected under such a system, no one would lay out capital even to save the land from exhaustion, and seeing that there was every chance of the land becoming poorer and poorer annually, some communities agreed to a permanent division, some divided nearly all, (the undivided portion being termed samudayam), and only a very few have made no division as yet.

82. It is worth while trying to divide the small residue of common lands now, for however small the samudayam may be, it still retains all the evils of the sharing system. The larger shareholders have managed to usurp more than their shares. The necessities of others have induced them to sell or mortgage shares which have fallen into the hands of strangers, who have got puttahs in their names for *lands* instead of for *shares*. Puttahs too have been granted to palmyra climbers for the trees they climb, and occasionally for the lands on which the trees are situated. Thus all is confusion; the struggle is not only between the shareholders and strangers, but among the shareholders themselves. No one can identify his share in any particular field; the weaker

102 have been divided lately, and many of the others are in course of division.

have lost their shares entirely, while the more powerful have extended their possessions at the expense of their neighbours. I hope to divide every

village, with the exception of those in which law suits are pending, before the settlement begins, as the majority of the shareholders are glad of a chance to divide, and the abolition of this sharing system will be one of the greatest benefits that the Settlement will confer on the district.

83. VILLAGE SERVICE CESS.—With the exception of the Curnums or Accountants, the Village servants receive hardly any emolument from the State in the villages now reported on. The Moonsiffs, Mirassidars and Kavalgars mostly render public service gratuitously, the sum total paid them per annum being but 7,000 Rupees. The Curnums receive an aggregate of 20,599 Rupees annually. The Mirassidars correspond to the Maniagars, Maniyams, or Natamigars of other districts, and are employed to collect the revenue and remit it to the Talook Treasury. As they are generally the principal landholders and often resident at a distance from the village in which they hold office, they keep private Goomastahs, Seti Maniyams as they are called, to perform the chief part of their duty. There is, moreover, usually a Kudi Maniyam, or Representative of the people, who watches his clients' interests, and conducts the business of the village generally. There are Head Kavalgars in each village who employ cooly Kavalgars under them. These, with few exceptions, are Maravers, and were no doubt originally subsidized to protect the crops from injury. To this day the Kavalgars take the crops under their sole protection, and will not allow the cultivators to watch their own crops, or even to walk through the fields after night fall. The Kaval fees paid by the villagers are enormous, upwards of 1,000 Rupees in some villages, and though the Kavalgars are useful as messengers and attendants on the village officers, they are more feared than loved by the people, who find their grain robbed in the ear at night, and their property constantly

Vide page 830 of correspondence relating to Village Establishment.

pilfered. It is true that an allowance was made for Village Service when calculating the Government share of the crop under the Ulungu system,

but that system passes away when the Settlement is introduced, and there will be nothing tangible left.

84. A cess of 6 $\frac{1}{4}$ per cent on the new assessment will provide a *bona fide* working establishment of one Moonsiff, one Maniagar, one Curnum, and 2 Taliaries for each village, and will yield 63,791 Rupees for 345 villages, or 173 Rupees annually, or Rupees 15 a month for each village. The Village Service Cess was insufficient in Trichinopoly to pay the establishment, as the emoluments were already considerable. Here, on the contrary, the emoluments are very small, and the new cess will raise them by 36,192 Rupees.

85. ROAD CESS.—The road cess amounts to 31,896 Rupees at 3 $\frac{1}{2}$ per cent on the new assessment.

Board's Proceedings No. 5,781, dated 10th August 1868.

This does not include the Zemin lands and Inams which have been separately assessed for a term of 3 years, on an estimated yield of

5, 4, or 3 cottahs of grain for each cottah of wet land under the Tambrapurni, minor rivers, and rain-fed tanks respectively, and on the ascertained rent of the dry lands. A general scheme for the roads of the district lately submitted is now under consideration, and a commencement has been made with several important lines.

86. IRRIGATION CESS.—An irrigation cess of 6 pies in the Rupee, or 3 $\frac{1}{2}$ per cent on the wet land assessment, will give 28,613 Rupees. Some such cess is urgently needed, as the tanks and

808 Shutters for the sluices were lately found wanting in one talook.

late years, and the establishment for the distribution of water must be largely increased in some places. Cowle Maniyams are granted for the repair of tanks or channels, and in the Tenkarei Talook there is Pullur Maniyam, that is, the usufruct of the scattered palmyras is granted free of tax to the Pullers or agricultural labourers, to keep the channels in order; as may be supposed,

Within the last 2 years the parties concerned have subscribed 40,000 Rupees for the Padukudi channel, 12,000 Rupees for the Virdupatti tank, 5,000 Rupees for the Tinnevelly tank, and 2,000 Rupees for the Chintamani channel; and, as I write, the people of Kilattum have brought 1,500 Rupees, and begged me to aid in improving their tank.

sion. If the Engineer and Collector work together

Vide my letter to the Board No. 108 dated 6th March 1868.

the area under irrigation may be increased by 50 per cent.

87. EXISTING RATES OF ASSESSMENT.—The Motafysal system prevails in 279 of the 345 villages now reported on; 3 pay on the quality of the Poravu or area under each tank; 10 pay according to the quality of the chey or block; 34 pay on an average struck on each puttah; 15 are taram villages, and 4 are dry, but being intermixed with the irrigated villages they cannot be separated from them. The assessment varies from Rupcos 12-6-0 to Rupees 1-10-3 an acre for single crop wet land, and from Rupees 1-8-0 to 11 pies an acre for dry land. The highest rates are in the poorest talook, Nanguneri, where some lands are charged as high as 26-10-0 for two crops, but the total average of the river valley is Rupees 8-3-0 for single crop wet land, Rupees 12-0-0 for double crop wet land, and 9 annas an acre for dry land.

88. AVAILABLE ASSETS OF REVENUE.—There is no waste, properly so called, the whole of the culturable area being held on puttah and paid for. There is, therefore, no possibility of making up any reduction of revenue, except by the extension of irrigation; fortunately there are great facilities for this. There is no anicut on the river for the last 30 miles of its course, and the proposed works at Strivycuntam alone will increase the revenue by 1,15,716 Rupees. Branches thrown off from the upper channels will perhaps add as much more to the revenue, but it is not the larger works that are always the most remunerative. A very small expenditure will increase the irrigable area under many a tank and channel, or at all events reduce the chance of failure of crop to a minimum. The people spare no pains on their part, and will cut down high levels several feet to adapt them for irrigation, but before any alteration in the mode of distributing water is made, I think it highly necessary that the Government right to the water should be adjudicated, as any one can now bar improvement by bringing a suit in Court, and proving that his water supply is diminished by some new work undertaken by Government.

89. FINANCIAL RESULTS OF THE SETTLEMENT.—All the processes of this Settlement have been worked out at the highest figure possible. The classification brings 73 per cent of the area into the 3 upper classes; the yield of the land is estimated at 25 per cent higher, and the rate of conversion into money at 38 per cent higher than in Trichinopoly; the second crop charge is double that of Trichinopoly, and the road cess is not included in the money rates as it was in Trichinopoly. Take it all in all, the Settlement here will be as high as a Settlement can be made, the single crop average, without cesses being Rupees 6-12-0, or only an anna an acre less than in the Godavary. The highest assessment is 15 Rupees an acre, at which rate 10,000 acres will be charged. (The highest assessment in Trichinopoly is Rupees 10-8-0 an acre, and less than 1,000 acres are charged at that rate). To these very high averages, we must add two annas in the Rupee for cesses, and this will increase the maximum rate to Rupees 16-14-0, and the average single crop charge to Rupees 7-9-6 an acre. The assessment of the bona fide dry land will hardly be affected by Settlement, for though a large area is now held at less than the Settlement minimum of 4 annas an acre, the assessment of the whole averages 9 annas an acre now, and will average by Settlement 8 annas one pic an acre, or, with Road and Village Service Cesses, 8 annas 10 pies an acre.

90. The Revenue to be affected by Settlement is Rupees 13,60,337 including Road Cess: the proposed assessment is Rupees 11,44,974 including Road, Irrigation and Village Service Cesses. The reduction is therefore Rupees 2,15,363. viz., Rupees 94,364 in single crop, Rupees 1,11,787 in 2nd crop, and Rupees 9,212 in dry land; but from this reduction Rupees 27,599 now paid by Government for Village Establishment, and Rupees 2,000 of Tree-tax now remitted as Puller Maniyam must be subtracted, and the net reduction by Settlement will be Rupees 1,85,764 or 13½ per cent of the present assessment.

channels are falling into rapid decay. The minor arrangements on which the success of irrigation depends have been much overlooked of late years, and the establishment for the distribution of water must be largely increased in some places. Cowle Maniyams are granted for the repair of tanks or channels, and in the Tenkarei Talook there is Pullur Maniyam, that is, the usufruct of the scattered palmyras is granted free of tax to the Pullers or agricultural labourers, to keep the channels in order; as may be supposed, these grants have degenerated into mere Personal Inams, and nothing has been spent on repair. This neglect is not the fault of the people, who are liberal to a degree and will pay anything to get water, but arises from divided authority, and from the want of direct supervision to lay out the money to the best of their ability and judgment, the irrigation cess is likely to develop the resources of this district to an almost incredible extent, as I calculate that

A.

Statement comparing the proposed assessment of single crop in the valley of the Tamrapurni of the Tinnevelly District with the present assessment based on Curnums' areas.

Talooks.	Group.	Area as per Curnums' accounts.	ASSESSMENT, COMPARISON, PER CENTAGE AND AVERAGE.					
			Assessment.		Decrease.	Per-cent-age.	Average per acre.	
			Present.	Proposed.			Present.	Proposed.
1	2	3	4	5	6	7	8	9
		ACRS.	RS.	RS.	RS.		RS. A. P.	RS. A. P.
Tenkasi...	2	3,348	25,918	20,098	5,820	22	7 12 0	6 0 0
	3	13,231	82,974	58,721	24,253	29	6 4 0	4 7 0
	4	271	1,361	889	472	34	5 0 0	3 4 0
	Total.	16,850	1,10,253	79,708	30,545	28	6 9 0	4 12 0
	Ambasamudram.	1	9,461	1,03,997	78,879	25,118	24	11 0 0	8 5 0
Tinnevelly	2	8,819	72,880	55,150	17,730	24	8 4 0	6 4 0
	3	6,010	38,375	26,933	11,442	30	6 6 0	4 8 0
	Total.	24,290	2,15,252	1,60,962	54,290	25	8 14 0	6 10 0
	1	8,113	86,176	68,583	17,593	20	10 10 0	8 7 0
	2	6,741	62,934	48,429	14,505	23	9 5 0	7 3 0
Tenkarai...	3	5,777	36,345	28,215	8,130	22	6 4 0	4 14 0
	4	2,474	13,609	9,016	4,593	34	5 8 0	3 10 0
	Total.	23,105	1,99,064	1,54,243	44,821	23	8 10 0	6 11 0
	2	17,479	1,57,432	1,23,055	34,377	22	9 0 0	7 1 0
	3	6,878	44,836	35,297	9,539	21	6 8 0	5 2 0
Nanguneri... ...	4	770	2,606	2,601	5	0	3 6 0	3 6 0
	Total.	25,127	2,04,874	1,60,953	43,921	21	8 2 0	6 7 0
	2	5,584	57,625	33,334	24,291	42	10 5 0	5 12 0
	3	4,916	40,696	24,350	16,346	40	8 4 0	4 15 0
	Total.	10,500	98,321	57,684	40,637	41	9 6 0	5 6 0
Total...	1	17,574	1,90,173	1,47,462	42,711	22	10 13 0	8 6 0
	2	41,971	3,76,789	2,80,066	96,723	26	9 0 0	6 11 0
	3	36,812	2,43,226	1,73,516	69,710	29	6 10 0	4 11 0
	4	3,515	17,576	12,506	5,070	29	5 0 0	3 9 0
	Total.	99,872	8,27,764	6,13,550	2,14,214	26	8 5 0	6 2 0

B.

Statement comparing the proposed assessment of second crop in the valley of the Tamrapurni of the Tinnevelly District with the present assessment based on Curnums' areas.

Talooks.	Group.	Area as per Curnums' accounts.	ASSESSMENT, COMPARISON PER CENTAGE AND AVERAGE.						
			Assessment.			Decrease.	Per centage.	Average per acre.	
			Present.	Proposed.				Present.	Proposed.
1	2	3	4	5	6	7	8	9	
		ACRS.	RS.	RS.	RS.		RS. A. P.	RS. A. P.	
Tenkasi	{	2 1,355	7,560	5,229	2,331	31	5 9 0	3 14 0	
		3 3,220	13,735	5,946	7,789	56	4 4 0	1 3 0	
		4 124	449	159	290	64	3 10 0	1 4 0	
		Total. 4,699	21,744	11,334	10,410	48	4 10 0	2 10 0	
Ambasamudram.		1 8,484	71,381	44,863	26,518	37	8 7 0	5 5 0	
	{	2 6,251	39,105	24,904	14,201	36	6 4 0	4 0 0	
		3 2,230	9,493	4,340	5,153	54	4 4 0	1 15 0	
		Total. 16,965	1,19,979	74,107	45,872	38	7 1 0	4 6 0	
Tinnevelly		1 6,902	60,146	36,361	23,785	40	8 11 0	5 4 0	
	{	2 4,363	30,347	18,857	11,490	38	6 15 0	4 5 0	
		3 1,789	6,803	3,459	3,344	49	3 13 0	1 15 0	
		4 711	2,825	1,219	1,606	57	4 0 0	1 11 0	
		Total. 13,765	1,00,121	59,896	40,225	40	7 4 0	4 6 0	
Tenkarai	{	2 11,894	88,874	54,921	33,953	38	7 7 0	4 10 0	
		3 3,170	16,546	8,122	8,424	51	5 3 0	2 9 0	
		Total. 15,064	1,05,420	63,043	42,377	40	7 0 0	4 3 0	
Nanguneri	{	2 2,309	17,450	8,168	9,282	53	7 9 0	3 9 0	
		3 1,030	6,255	2,260	3,995	64	6 1 0	2 0 0	
		Total. 3,339	23,705	10,428	13,277	56	7 1 0	3 2 0	
Total	{	1 15,386	1,31,527	81,224	50,303	38	8 9 0	5 4 0	
		2 26,172	1,83,336	1,12,079	71,257	39	7 0 0	4 5 0	
		3 11,439	52,832	24,127	28,705	54	4 10 0	2 2 0	
		4 835	3,274	1,378	1,896	58	3 15 0	1 10 0	
		53,832	3,70,969	2,18,808	1,52,161	41	6 14 0	4 1 0	

C.

Statement comparing the proposed assessment of all irrigated lands, (single and double crop inclusive) in the valley of the Tambrapurni of the Tinnevelly District, with the present assessment based on Curnums' areas.

Talooks.	Group.	Area as per Curnums' accounts.	ASSESSMENT, COMPARISON, PER CENTAGE AND AVERAGE.					
			Assessment.		Decrease.	Per centage.	Average per acre.	
			Present.	Proposed.			Present.	Proposed.
1	2	3	4	5	6	7	8	9
		ACS.	RS.	RS.	RS.	RS.	A. P.	RS.
Tenkasi	{ 2	3,348	33,478	25,327	8,151	24	9 15 0	7 9 0
	3	18,231	96,709	64,667	32,042	33	7 5 0	4 14 0
	4	271	1,810	1,048	762	42	6 11 0	3 14 0
	Total.	16,850	1,31,997	91,042	40,955	31	7 13 0	5 6 0
Ambasamudram	{ 1	9,461	1,75,378	1,23,742	51,636	29	18 9 0	13 1 0
	2	8,819	1,11,985	80,054	31,931	29	12 11 0	9 1 0
	3	6,010	47,868	31,273	16,595	35	7 15 0	5 3 0
	Total.	24,290	3,35,231	2,35,069	1,00,162	30	13 13 0	9 11 0
Tinnevelly	{ 1	8,113	1,46,322	1,04,944	41,378	28	18 1 0	12 15 0
	2	6,741	93,281	67,286	25,995	28	13 13 0	15 0
	3	5,777	43,148	31,674	11,474	27	7 7 0	5 8 0
	4	2,474	16,434	10,235	6,199	38	6 10 0	4 2 0
	Total.	23,105	2,99,185	2,14,139	85,046	28	12 15 0	9 4 0
Tenkarei	{ 2	17,479	2,46,306	1,77,976	68,330	28	14 1 0	10 3 0
	3	6,878	61,382	43,419	17,963	29	8 15 0	6 5 0
	4	770	2,606	2,601	5	0	3 6 0	3 6 0
	Total.	25,127	3,10,294	2,23,996	86,298	28	12 5 0	8 14 0
Nanguneri	{ 2	5,584	75,075	41,502	33,573	45	13 7 0	7 7 0
	3	4,916	46,951	26,610	20,341	43	9 9 0	5 7 0
	Total.	10,500	1,22,026	68,112	53,914	44	11 10 0	6 8 0
Total...	{ 1	17,574	3,21,700	2,28,686	93,014	29	18 5 0	13 0 0
	2	41,971	5,60,125	3,92,145	1,67,980	30	13 5 0	9 5 0
	3	36,812	2,96,058	1,97,643	98,415	33	8 1 0	5 6 0
	4	3,515	20,850	13,884	6,966	33	5 15 0	3 15 0
	Total.	99,872	11,98,733	8,32,358	3,66,375	31	12 0 0	8 5 0

D.

Statement comparing the proposed assessment of dry lands in the irrigated villages of the valley of the Tamrapurni of the Tinnevelly District with the present assessment based on Curnums' areas.

Talooks.	Total area as per Curnums' accounts.	ASSESSMENT, COMPARISON, PER CENTAGE AND AVERAGE.					
		Assessment.		Decrease	Percentage.	Average rate of assessment per acre.	
		Present.	Proposed.			Present.	Proposed.
1	2	3	4	5	6	7	8
		ACS.	RS.	RS.	RS.	RS. A. P.	RS. A. P.
Tenkasi	47,722	44,846	32,713	12,133	27	0 15 0	0 11 0
Ambasamudram.....	43,745	19,105	16,202	2,903	14	0 7 0	0 6 0
Tinnevelly	51,385	22,697	17,665	5,032	22	0 7 0	0 6 0
Tenkarei	31,688	22,745	19,234	3,511	15	0 11 0	0 10 0
Nanguneri	33,676	10,988	9,713	1,275	12	0 5 0	0 5 0
Total.....	2,08,216	1,20,381	95,527	24,854	21	0 9 0	0 7 0

E.

Talookwar Statement of the proposed second crop assessment based on Curnams' areas.

Talooks.	At $\frac{1}{2}$.		At $\frac{1}{2}$.		At $\frac{1}{2}$.		Total	
	Extent in Acres.	Second crop assessment in Rupees.	Extent in Acres.	Second crop assessment in Rupees.	Extent in Acres.	Second crop assessment in Rupees.	Extent in Acres.	Second crop assessment in Rupees.
1	2	3	4	5	6	7	8	9
Tenkasi	639	3,073	1,635	4,628	2,425	3,633	4,699	11,334
Ambasamudram.	9,404	51,467	6,077	20,417	1,484	2,223	16,965	74,107
Tinnevelly	6,552	36,948	5,455	20,201	1,758	2,747	13,765	59,896
Tenkarei	9,105	45,184	4,988	16,208	971	1,651	15,064	63,043
Nanguneri	670	3,074	2,113	6,428	556	926	3,330	10,428
Total...	26,370	1,39,746	20,268	67,882	7,194	11,180	53,832	2,18,808

F.

Statement exhibiting the Curnums' area and proposed assessment of the irrigated and dry lands of the Tambrapurni valley under each money rate.

Irrigated or dry lands.	Rate per acre.	TENKASI.		AMBASAMUDRAM.		TINNEVELLY.		TENKAREI.		NANGUNERI.		TOTAL.	
		Extent in acres.	Assess-ment in Rupees.	Extent in acres.	Assess-ment in Rupees.	Extent in acres.	Assess-ment in Rupees.	Extent in acres.	Assess-ment in Rupees.	Extent in acres.	Assess-ment in Rupees.	Extent in acres.	Assess-ment in Rupees.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
R.A.													
9 0	...	...	4,740	42,660	5,528	49,752	...	...	...	...	...	10,268	92,412
8 0	256	2,048	5,462	43,696	4,412	35,296	6,930	55,440	...	...	...	17,060	136,480
7 0	854	5,978	3,636	25,452	3,424	23,968	5,818	40,726	1,697	11,879	15,429	108,003	
6 0	3,040	18,240	2,868	17,208	2,601	15,606	7,113	42,678	3,771	22,626	19,393	116,358	
5 0	4,260	21,300	2,957	14,785	2,359	11,795	1,864	9,320	3,125	15,625	14,565	72,825	
4 0	5,323	21,292	2,581	10,324	2,691	10,761	2,200	8,800	1,779	7,116	14,574	58,296	
3 8	2,998	10,493	1,434	5,019	1,585	5,547	854	2,989	107	375	6,978	24,423	
3 0	119	357	575	1,725	505	1,515	304	912	21	63	1,524	4,572	
2 8	...	...	87	93	...	...	...	...	...	...	...	37	93
2 0	...	...	...	...	...	...	44	88	...	...	...	44	88
		16,850	79,708	24,290	1,60,962	23,105	1,54,243	25,127	1,60,953	10,500	57,684	99,872	6,13,550
Irr. lands.													
3 8	1,172	4,102	904	3,164	562	1,967	1,520	5,320	236	826	4,394	15,379	
2 8	357	893	21	52	198	495	718	1,795	24	60	1,318	3,295	
1 8	...	...	...	...	...	...	46	69	...	...	46	69	
1 0	4,167	4,167	...	...	...	...	211	211	...	...	4,378	4,378	
0 12	12,292	9,219	...	...	2,276	1,707	3,232	2,424	...	...	17,800	13,350	
0 8	25,461	12,730	...	...	3,725	1,863	5,760	2,880	1,654	827	36,600	18,300	
0 6	4,273	1,602	18,247	6,843	3,822	1,433	11,874	4,453	468	176	38,684	14,507	
0 4	...	...	24,573	6,143	40,802	10,200	8,327	2,082	31,294	7,824	104,996	26,249	
		47,722	32,713	43,745	16,202	51,385	17,665	31,688	19,234	33,676	9,713	208,216	95,527

G. Statement comparing the proposed assessment inclusive of Cesses with the present assessment in the irrigated villages in the valley of the Tambrapurni of the Tinnevelly District.

Particulars.	Area.		Assessment.			Other Cesses.			Total assessment inclusive of all cesses.	As per calculation.	Inclusive of 10 per cent. and Road Cess.	Inclusive of 10 per cent. and Road Cess. all cesses.	Average Rate of Assessment per Acre.	
	As per Curr. numbers' accounts.	Add 10 per cent. for increase by survey.	Total.	As per calculation.	Add 10 per cent. for increase by survey.	Total.	Road cess.	Village Cess.	Irrigation Cess.	Total.	As per calculation.	As per calculation.	As per calculation.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1st crop.	ACR.	ACR.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS. A. P.
Present.....	99,872	9,987	1,09,859	8,27,764	...	8,27,764	25,568	8,53,632	...	...	8,53,632	...	...	Rs. A. P.
Proposed.....	...	...	61,355	6,74,905	...	6,74,905	21,091	6,95,996	42,191	21,091	63,272	84,363	7,59,268	...
Decrease.....	...	...	2,14,214	...	...	1,52,859	4,777	1,57,636	...	...	...	94,304	26	18
Present.....	53,832	5,883	59,215	3,70,569	...	3,70,569	11,593	3,83,562	...	...	3,82,562	...	...	...
Proposed.....	...	...	2,18,808	21,881	2,40,689	7,521	2,48,210	15,043	7,522	22,565	30,086	2,70,775	...	...
Decrease.....	...	...	1,52,161	...	1,30,280	4,072	1,34,352	...	...	...	1,11,787	41	35	...
Present.....	99,872	9,987	1,09,859	11,98,733	...	11,98,733	37,461	12,36,194	...	...	12,36,194	...	...	...
Proposed.....	...	...	8,32,858	83,236	9,15,594	28,612	9,44,206	57,224	28,613	35,837	11,14,449	10,30,043	...	8 5 4 9 7 8 10 5 0
Decrease.....	...	...	8,66,375	...	8,33,139	8,849	8,91,988	...	...	...	2,06,151	31	23	...
Present.....	2,08,216	20,822	2,29,038	1,20,381	...	1,20,381	3,762	1,24,143	...	...	1,24,143	...	...	...
Proposed.....	...	...	95,527	9,553	1,05,080	3,284	1,08,364	6,567	...	6,567	1,14,931	...	...	0 7 4 0 8 4 0 8 10
Decrease.....	...	...	24,854	...	15,301	478	15,779	...	...	...	9,212	21	12	...
Present.....	3,08,088	30,890	3,38,897	13,19,114	...	13,19,114	41,223	13,60,337	...	...	13,60,337	...	...	...
Proposed.....	...	...	9,27,885	92,789	10,20,674	31,896	10,52,570	63,791	28,613	92,404	11,44,974	...	...	3 0 2 3 6 8 3 11 5
Decrease.....	...	...	3,91,229	...	2,98,440	9,327	3,07,767	...	...	...	2,15,363	30	23	...
Total.	Dry.													

R. K. PUCKLE,
Collector.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 22nd May 1869.

Read letter from the Collector of Tinnevelly, dated 11th September 1868, submitting for approval a scheme for the settlement of the river-irrigated villages of the District:—

IN this report Mr. Puckle explains the scheme of settlement for the portion of the Tinnevelly District watered by the Tambrapoorny river. The classification and settlement of Tinnevelly have, as the Government are aware, been under consideration since 1866, and the results, as will be seen from the present report, evidence great care and attention on the part of the officer who has matured the scheme.

2. Mr. Puckle's report opens with a sketch history of the district, setting forth its physical features and productions, its varied population, and its revenue treatment under successive systems. It is not necessary to recapitulate or even to summarize the whole of the useful information here given, those points only will be selected for notice which bear upon the merits of the scheme.

3. Foremost among these is the cause which renders it necessary to treat this portion of the district exceptionally; Tinnevelly comprises four tracts of country distinguished from each other by characteristics the most opposite; a sandy desert forms the south-eastern portion of the district covered with Palmyra forest and producing little else; to the north-west of this lies the highly cultivated valley of the Tambrapoorny river whose waters rarely fail. The black soil cotton tract, devoted chiefly to that species of cultivation and to tobacco and cholum occupies the north-eastern section, and to the west of this lies that portion of the district which consists almost entirely of different varieties of red soils, and enjoys no special advantages of irrigation. This brief description sufficiently explains the necessity for dealing specially with the assessment of each of these tracts.

4. Tinnevelly is the most highly assessed district in the Madras territories, the real incidence of its land-tax is far heavier than in Tanjore, where, although the amount of revenue paid by individuals averages a higher sum than elsewhere, as shown in the table given by Mr. Puckle, the rate per acre is lower than in almost any other district, besides which every family of four persons in Tinnevelly pays Rupees 2-10-0 per annum in Salt, Stamp, and Abkarry taxes.

5. The comparison of the rates of taxation in Tinnevelly with those of neighbouring districts such as Trichinopoly where revised rates are in force, or Tanjore where existing rates have been declared to need no revision, is of much importance; for whatever course be pursued in determining by classification of the soil, by test of yield, and by choice of rates of conversion, the assessment which the land shall bear it is clearly impossible to disregard the rates of settlement already approved by the Government in districts, the conditions of which, though not corresponding with precision to those of the province in course of settlement, so far approximate to them as to leave but a narrow margin for inequalities of assessment. There should be, the Board submit, in the revision of assessment now in progress throughout the Presidency a certain uniformity and consistency, qualified only by the consideration of the natural and artificial

* Godavery.
Kistna.
Kurnool.
Salom.
Trichinoly.
South Arcot.

advantages or drawbacks observable in different districts. Thus in considering the Tinnevelly settlement, regard must necessarily be had to what has been done to the six* districts already treated by the Settlement Department.

Under the Hindoo system private property existed till the Mahomedan Era.

"Over the whole extent of this country (Dravedu) as in every other in which the authority of the Shasters was acknowledged, one-sixth was the legitimate share of the crop payable to the sovereign. Before and after the period at which we have arrived the evidence of private property in land is so abundant, that I will spare the reader the ample detail which might easily be presented to him of public recorded gifts of land from individuals to the temples, and of the constant transfer of lands by sale and mortgage in spite of all the oppressions, which the proprietors had sustained, even after that period when the postlent doctrine of the sovereign being the actual instead of the figurative proprietor of the soil began to be promulgated by the British Government.

to the assessment of land in India with accuracy or propriety, because that assessment represents simply the value of the Government co-proprietor interest in the land, a strictly limited right which carries with it no authority to govern the disposal of the land by sale, mortgage, or bequest, nor even to determine the uses to which it shall be put; this authority goes with the true landlord right, and in India is vested in the ryot as the real proprietor. Practically also this condition will be found to narrow the limits within which a rate of conversion can be selected.

7. Before quitting the question of comparisons the Board think it useful to note here that in point of natural advantages the Delta irrigated lands of Tanjore and Trichinopoly are more favored than the valley of the Tambrapoorny. The Tambrapoorny is filled by rain which falls to the east of Western Ghauts, and is, therefore, less certain and less abundant than rivers, such as the Cauvery and Coleroon, which have their sources in localities where the south-west monsoon prevails in full force. The waters of this river are clear and deposit none of that fertilizing silt which supersedes the use of manure in the lands under the Cauvery and Coleroon channels, the fertility of the valley lands is the result of exceptionally careful tillage and heavy manuring assisted by an irrigation which contributes only the condition of moisture.

8. As regards the variety of its productions and the extent and value of its export trade, the district of Tinnevelly is favorably circumstanced, and has profited largely by the prices obtained for its cotton since the American war.

9. The Board now proceed to notice briefly the Revenue history of the district. Tinnevelly like all the other districts of the Presidency passed through the exhausting influences of Mahomedan exaction. Mr. Puckle states the Hindoo rates which preceded that period at a maximum of about one-half of those at present in force, but in speaking of the Hindoo system it should be remembered that the earliest historical records of India give one-sixth of the gross produce, and in time of war one-fourth of the gross produce as the limits of the Sovereign's demand; whereas that system, of which the Zemindary estates throughout the country still afford us examples, shows that the original limits of the demand had been set aside by the power and cupidity of the governing authority till one-half the gross produce was taken from the occupant and real owner of the land, and though this practice fell short of the Mahomedan spoliation it has proved sufficiently onerous (where it has been still maintained) to prevent the accumulation of wealth in the hands of the actual cultivator, whose condition under this system rises little above pauperism.

"The taxes of various kinds which may be levied by the King are detailed by Menu with great minuteness. Of the produce of the land* a sixth * Menu, Ch. 7, V. 127—132. is the largest share which can be taken in ordinary circumstances, and a fourth in times of urgent distress, but the whole term of the Institute and the Digest show that the sixth part of the crop is the King's share, which is constantly in the contemplation of all Hindoo Lawyers."

"A tenth is the traditional share paid in "India" before the institution of the sixth, it is the portion paid in (1810) the little principality of Coorg at this day and the date found and continued that tax in Ceylon."

"The commencement of the first fixed Mahomedan Government ("in Dravedu") may be dated about the year 1691. * * * The whole financial plan of a Mahomedan Government exercised over infidels is comprised in the following short extract from their most celebrated law tract, (Hedaya Bk. 9, Ch. 7.)

"The learned in the law allego that the utmost extent of tribute is one-half of the actual product, nor is it allowable to exact more, but the taking of half is no more than strict justice and is not tyrannical because as it is lawful to take the whole of the persons and property of infidels, and to distribute them among the Mussulmen it follows that taking half their incomes is lawful a portion." * * * Those who contend for the proprietary right of the sovereign will at this stage of oppression certainly find him to possess one-half of the produce as a barbarous remuneration for not having murdered the original proprietor, but I will not insult my countrymen by supposing that an individual can be found among them who, knowing the nature of the right, if right it may be called, would desire to succeed to it."—Col. Wilks' "South of India" published in 1810.

10. On the assumption of this province by the British Government, although the people were relieved from the grievous burdens laid upon them by their Mahomedan rulers, the demand of one-half the gross produce was still taken to represent the right of Government. This demand was for ■ while realised in kind, and when that cumbrous system became intolerable, attempts were made to farm the Government share on leases, first of three and then of ten years' term; the value of the share being commuted at rates approximating the market price of the day. Both these attempts signally failed, apparently from the adoption of rates of conversion which gave the grain assessment at its full value, and a yearly adjustment was then adopted by which, under the name of Ulungu, the rates of conversion varied with current prices within limits, resulting from an arbitrary but partial adjustment to a fixed standard price. All increase of price above 10 per cent. of the standard was included in the demand, while all decrease below 5 per cent. of the standard was remitted to the ryot, the Government rent thus accommodated itself to the rise and fall of the market rates, a principle apparently sound but in its practical application in the form observed, of injurious tendency, not only because the adjustment of price being annual, rendered annual interference necessary, a most grave evil, but because it draws too largely on the land-holder in seasons of high prices when produce is generally short, the Government alone having the benefit of all increase in price above 10 per cent. of the standard rate. Thus, supposing the increase above the standard to be 70 per cent., as has occurred frequently of late, the land-holder enjoys only 10 per cent., the remaining 60 per cent. being paid by him to Government.

11. This expedient, however, was not proof against sudden rises of the market, and as it was found that an adherence to the system during periods of high prices, raised the assessment to an impossible amount, it was abandoned in favor of a very moderate permanent commutation rate, under which system the district still continues; and though in the absence of any equitable classification of land or apportionment of assessment, gross inequalities disfigure the present arrangement, and some of its rates are exceptionally high, general contentment and prosperity have dated from the change. The abandonment of the Ulungu system was also found necessary in Tanjore. The moral of these experiments is that one-half of the gross produce, converted into money at current prices, constitutes a burden quite beyond the capacity of the land.

* NOTE.—Prices fell last year 20 per cent.

Proof is also afforded of the extreme difficulty of maintaining equitable conversion rates if they are governed by the fluctuation of prices.*

12. The definite abandonment by the British Government of this system was tantamount to ■ deliberate relinquishment of the Mahomedan claim to one-half of the gross yield taken at its market value, and for many years past, in the modified assessments, the Government demand has never approached this limit in any part of the country; it will be found in fact to approach more nearly to the demand of one-fourth, sanctioned in time of war by the ancient Hindoo Institutes. From these preliminary remarks the Board proceed to follow the process by which Mr. Puckle arrives at the conclusions which are now laid before the Government, and which the majority of the Board on the whole approve and would support.

13. Mr. Puckle's scheme of classification has the entire concurrence of the Board. He has approached this task with the advantage of the experience gained in Salem and Trichinopoly, using the tables framed for those districts, but introducing the alterations which local peculiarities rendered necessary, and which his working experience approved. The classification was made over tracts instead of by fields, and although the recognition of essential differences in this mode of classification is more minute and shows more numerous varieties of soil in the tables, there is no consequent increase of classes or "tarums" for assessment purposes; greater completeness is, therefore, gained without any accompanying inconvenience. The preponderance of lands of the better sort in the table of irrigated lands is worthy of remark, and is in striking contrast with the results of dry land classification, which show that the bulk of the dry land of the valley is of ■ very inferior description and incapable of bearing any but the lightest assessment.

14. The majority of the Board regard with equal confidence the result of the experiments undertaken in order to ascertain the actual yield of each class of land in the valley. It is true that the Trichinopoly experiments gave in some cases a higher average of production; but on the whole Mr. Puckle's estimates average higher than those adopted in the Trichinopoly settlement. The method followed by Mr. Puckle and his officers is one that cannot fail to furnish reliable data, provided the operations are carefully watched and results fairly recorded, and on these points no room for distrust appears; the value of the result is confirmed in a remarkable manner by the agricultural experience of the district, for the ordinary estimation of yield accepted among the ryots differ little from the results at which the Settlement Officers arrived.

15. These results give a range of production varying from a rare minimum of six-fold to

The calculation of increase stated in the Shastre is twelve-fold.

NOTE.—It is the practice to put down about twice as much seed in Tinnevelly as is sown in Trichinopoly and Tanjore, consequently a yield of twenty-fold on Tinnevelly seed would be forty-fold on the quantity sown in Tanjore and elsewhere.

Over three lacs of Rupees were remitted in 1866.

a full crop maximum of twenty-one-fold, and it is not denied that there are a few highly favored lands capable of producing still heavier crops; but bearing in mind vicissitudes of season and recent remissions, the Board think that Mr. Puckle, taking an average between a minimum of six-fold and an ordinary maximum of eighteen-fold, has fairly stated the mean ratio of produce at twelve-fold.

16. The next two steps in the process of settlement, viz., commutation and calculation of net proceeds must be taken together, as the Board will proceed to show. It has been already observed that the assessment of Tinnevelly is exceptionally high, being double that which obtains in the more favored districts of Tanjore and Trichinopoly, and in excess also of the Delta assessment in the Godavery District. It follows that the revision now proposed implies such an amount of reduction in the rates as will at least bring them nearer to those of these districts.

17. In Trichinopoly the Government and the Secretary of State, to whom a special reference was made, assented to a reduction of four lacs of Rupees, and if the rates of that district were applied to the Tambrapoorney lands a still greater abandonment of revenue would result. The Board gather, however, from the remarks of Government on the settlement proposed by them for the Salem District that such a course would not have their approval or assent, and Mr. Puckle has apparently framed his settlement to meet the limits to which these considerations reduce him.

18. Most of the conditions which rule the settlement being matters of fact are of a stable character and admit of no departure from their requirements, the quality of the soil, its average yield, the conditions which regulate the grouping of villages, the deductions which reduce gross produce to net proceeds, are all treated in this sense by Mr. Puckle, and the one remaining condition, whose fluctuations are available to modify, the final result is that of conversion price.

19. This then he has of necessity dealt with so as to reach a foregone conclusion. His commutation rate of 11 Annas the cullum gives a net reduction on the existing assessment of about two lacs of Rupees, a result which, though it places the river valley on nearly the same footing as

the more favored Delta lands of the Godavery, and leaves it more highly taxed than those of the Delta of the Cauvery and Coleroon, will probably meet the views of Government, as the Board apprehend them from the Salem papers. The Board cannot, however, regard the process by which Mr. Puckle deduces the net from the gross yield as complete or just to the ryot, nor does it satisfy the views expressed by the Home Government.

Extract from a Despatch of the Home Government, No. 17 of 1856, paragraph 18.

"The fact that the holdings are generally of very small extent, that the labour is performed in most cases by the ryot and his family, and that the agricultural capital employed is usually of very small amount, does not, we apprehend, interfere with the operation of the principles to which we have adverted. The produce of the land must at least be sufficient to feed and clothe the labourer and his family and to replace the cattle and agricultural instruments as they become worn out, and besides this a surplus must remain for the payment of the assessment imposed by the State."

Extract describing the foundation of the Vizianuggur Dynasty in 1336.

" This sharo he was desirous of converting from a grain into a money payment and established fixed rules for the conversion founded on the quantity of land, the requisite doed, the average increase, and the value of grain, the result literally conforms to the law of the Digest, (Manu,) namely, one-sixth to the King, one-thirteenth to the Brahmins, one-twentieth to the gods, the rest to the proprietor. * * * * Thirty is the whole number on which the distribution is made, of which it is calculated that fifteen or one-half is consumed in the expenses of agriculture, and the maintenance of the former

(Net.) family. The distribution of the remaining fifteen stands thus:—

To the Sovereign (6th of the gross P)	5
To the Brahmin (5th do. do.)	1 $\frac{1}{2}$
To the gods (5th do. do.)	1 $\frac{1}{2}$
To the Proprietor	7 $\frac{1}{2}$

15

It appears by the statement above that $7\frac{1}{2}$ parts out of 30, including the portions devoted to the gods and to the Brahmins, passed through the bands of the sovereign, this is $\frac{1}{4}$ of the gross. Fifteen out of 30 parts, or one-half the gross, are deducted on account of maintenance and agriculture before dealing with the other half (which represents the net) and the proprietor and the sovereign equally divide this net residue. This is in exact conformity with the theory we are desired to carry out.

If one-half of 50 Cullums taken by Mr. Puckle as the highest gross be deducted for maintenance and expenses, and the remaining 25 Cullums divided between the ryot and the State, the assessment is 12 $\frac{1}{2}$ Cullums, which commuted at the average of a century gives Rupees 10-2-0, or nearly the same result as that exhibited in the calculation made by the Board.—(See paragraph 21.)

of his holding, and he must feed and house himself,

Statement of deductions to be made from the gross yield per acre as proposed by the Board.

Items.	Commutation price at average of 100 years, viz., 13 Annas the Cullum.		
	Value in grain.	Value in money.	Culls. Ms.
Subsistence for one family for one year at 40 cullums divided over an average holding of 6 to 7 acres.....	Say 6 Cullums		
Ms. 1 15			
Seed for one acre... 70	2 $\frac{1}{2}$		
Reaping ... 55	2 $\frac{1}{2}$		
Threshing and stacking 60	10		
Weeding	Ms. 60	10 Culs. 5 Ms.	
Total... 16 (fractions dropped for convenience.)			
Ploughing and keep of cattle— Set off against straw.			7 0 0
Manure ...			
Interest on value and maintenance expenses of house, sheds, implements, cattle, &c. at 5 per cent on Rupees 150=7-8, which distributed over six acres gives ...		1 4 0	
Total... 16 Total.		8 4 0	
Take Gross yield in grain at ... 50			
Deduct as above, dropping fractional part ... 16			
Remainder.. 34			
Commute at average of 100 years, namely, Annas 13 the cullum ...		27 10 0	
Deduct in money as above for manure and interest ...		8 4 0	
Value of Net residue ...		19 6 0	
Half value of do.		9 3 0	

NOTE.—Forty Cullums of Paddy gives to a family of four persons of all ages 2 $\frac{1}{2}$ seers of rice daily or thereabouts.

20. Had these deductions included the items which the Board will presently specify, the net residue commuted at the average of prices taken over an entire century instead of at the arbitrary rate of 11 Annas per cullum, to which Mr. Puckle has been driven, would have given the same financial results as Mr. Puckle has already reached for the higher classes of land. His list of deductions includes only the ordinary charges of casual labour in cultivating and harvesting, but

Weeding. though these charges are Reaping. commonly paid in grain he Threshing. Stacking. Seed Manure. has commuted them before deduction from the gross at

the rate he has selected. The charge for manure alone should have been expressed in money and reserved for final deduction, and the others should have been deducted in grain from the yield. Mr. Puckle sets the value of straw against ploughing and keep of stock which is fair enough, but he allows nothing for subsistence and nothing for the ryots legitimate interest on the money sunk in buildings, stock implements, and in maintaining or renewing them, all which the Home Government have recognized as fair deductions. The proper cultivation of the land depends on the constant residence of the ryot within reach of his family, and his stock.

21. Now the lowest estimate of the grain required for the food of a family of four persons would be at least 40 cullums of paddy for the year, or about 2 $\frac{1}{2}$ seers of rice daily, (a bare subsistence,) and taking the average of a small holding at six to seven acres of land, both wet and dry, the 40 cullums chargeable for subsistence may be stated at 1 cullum the acre.

Observing still the same moderation the Board estimate the value of house, backyard, sheds, cart plough, live stock at 150 Rupees, the interest on this at 5 per cent. is Rupees 7-8-0, and this divided over six acres gives a charge of Rupee 1-4-0 per acre. The table in the margin shows the result of these deductions (together with those already enumerated) from the gross yield; commuted at the average of the country, which is 13 Annas per cullum, Rupees 19-6-0 represents the net produce against Mr. Puckle's calculation of Rupees 20-6-0; and as he admits a deduction of 10 per cent. from the half net which seems needlessly high to represent unprofitable area, the same figure (Rupees 9), which he takes as his assessment rate, may fairly be deduced from a total net of Rupees 19-6-0.

22. This calculation has been applied only to the details which Mr. Puckle has given, and which belong to the highest class of land, for the lower classes the money result alone is given; but in fact, if the same process were applied throughout, the result in the three upper classes would differ little from Mr. Puckle's figures, while in the six following there would be an increasing reduction of the net, occasioned by the subtraction of an unvarying quantity from a yield diminishing in every successive class. As regards the incidence of ryots' subsistence, etc.,

on holdings of double and treble the size of the average here taken, (six acres,) it is sufficient to observe, first, that it would be impossible to adjust the calculation to areas of every size; and, secondly, that with extending area. larger numbers and increased capital have to be provided for. For this reason an extreme minimum is taken in the Board's illustration both as regards food and capital sunk in buildings, implements, etc.; 40 culums of paddy are in fact inadequate to the yearly support of two adults and two children, if rice is the food consumed; but among the poorer classes the rice would be to a great extent converted into a greater bulk of dry grains.

23. The Board have dwelt thus far on these details, because they believe that deductions from gross yield on the principle here explained are necessary to the attainment of such a settlement as the Home Government contemplated. Nevertheless, it is not their intention to press its adoption upon this occasion, or to substitute its conclusions for Mr. Puckle's rates, first, because a different method of calculation has been adopted in the settlements already concluded and approved in other districts; and, secondly, because it is believed that the Government are not prepared to assent to the further reduction of assessment which would result. If, however, that consideration must henceforth govern the adoption of settlements the processes by which they are computed lose much of their importance, though still valuable in adjusting the relative incidence of rates.

24. The cost of Settlement operations in this Presidency, and the time over which they have already extended, give much importance to this consideration, and the case of Tinnevelly illustrates in a striking manner the present position of the settlement question. The Board have now under their consideration a Memorandum submitted by Mr. Puckle, in which he calls special attention to this subject.

25. The incidence of the rate arrived at by Mr. Puckle is modified by the system of village grouping by which he redresses the inequalities which would follow the application of the highest rates to lands which are liable to them according to their place in the table of soils, but which, whatever their quality, are less favorably circumstanced in respect of position or irrigation, and should on this ground bear a lighter assessment. The several groups, therefore, take their rateable gradation under considerations of this nature; this avoids any violation of the consistent system followed in estimating the quality of soil, and has the approval of the Board as a necessary expedient to meet the difficulties of a formal classification.

26. It will be seen from paragraph 71 that an increase of area brought to account under survey adds 92,789 Rupees, or 10 per cent. to the proposed assessment, and in the following paragraph Mr. Puckle shows that 1,30,000 Rupees of the existing assessment is due to the practice (elsewhere unknown) of levying two full assessments on 34,595 acres of double-crop land instead of, as he now proposes, one full assessment, and from half to one-third of an assessment on the second crop. A diminution of revenue drawn from exactions so heavy and exceptional is unavoidable. It is, however, expected that 30,000 Rupees will be recovered by the extensive adoption of composition for second crop at the reduced rates now proposed on lands where this is optional.

27. The Board approve of the proposal to transfer so-called wet lands under small rain-fed tanks to the head of Dry, with the proviso that these lands should in most cases be placed in the higher dry classes. These lands will hereafter be nearly in the position of improved or garden land under well irrigation, and which is now classed at the highest dry rates. It is clear that the production of a Nunjah crop under such uncertain sources of irrigation must in many seasons be impossible, the repair at Government expense of mere ponds is little better than waste of money, and the change will be generally beneficial.

28. The tax on the Palmyra trees, which are to be found in great numbers on lands already cultivated and assessed, is obviously a very embarrassing sort of revenue. Every tree has not only its charge, but that charge varies with the age and sex of the palms, and the task of counting them could only be achieved by a methodical division of the tracts, where they are to be

found formed in regularly demarcated blocks. Mr. Puckle's proposed remedy may in time get rid of the difficulty thus created. He suggests that the tree tax which is now paid separately should be made redeemable at twenty years' purchase, so that the tax may in time disappear ; the trees after redemption being dealt with at pleasure by their owners and those that are not so redeemed being charged at quarter half and one Apna each according to class instead of at the present prevalent rates of 2½, 5, and 10 Pies each ; the experiment does not appear open to objection, and if it succeeds a great simplification will be effected.

29. The attempt to divide the common lands among village shareholders is recommended by the prospect which it offers of terminating the dissensions which now attend the system ; this question, however, has no immediate bearing on the settlement.

30. In regard to the introduction of a village service cess in the valley there will no longer, the Board observe, be any remuneration for village servants when the settlement takes effect, as the whole of the fees are absorbed in the disposal of gross produce here recommended, and there would remain only the 30,000 Rupees paid by the Government to the Curnums. It is proposed that a cess of 6½ per cent. on the new assessment should provide for payments of all kinds, relieving the Government of the Curnums' wages; the sum raised will be 63,791, and, as before observed, there seems no course open but to approve its introduction.

31. The road cess calls for no remark at present, its assessment on the tract under settlement is 31,896 Rupees, being 3½ per cent. on the new assessment.

32. The irrigation cess advocated in paragraph 86 can scarcely be brought in, the Board think, as an item of the proposed new assessment, as this subject must be treated uniformly throughout the country on whatever footing the Commission now sitting may decide with the approval of Government to adopt. Mr. Puckle gives some remarkable instances of large contributions by ryots for the prosecution of works in which they were interested, and the Board entertain little doubt that the increasing value of land under moderate assessment, with the prospect of permanence, will in time induce the ryots generally to spontaneous action in maintaining the efficiency of minor works to the great benefit of the revenue, as well as of private interests.

33. Prospective additions to the revenue of the colony are looked to from the extension of irrigation, and when the system has been completed as now contemplated, Mr. Puckle counts on an ultimate gain of 2,30,000 Rupees. In the last paragraph Mr. Puckle sums up the results of this scheme in comparison with the existing assessment after balancing additions and reductions, he states the entire amount of revenue given up at 1,85,764 ; but this takes into account Rupees 28,613 on account of Irrigation Cess, which must remain in abeyance at present; the reduction on the present settlement will, therefore, be Rupees 2,14,877. The majority of the Board recommend the adoption of the scheme and its rates on grounds which, as will have already appeared, have reference to settlements already approved, and to financial considerations ; it is better, they think, to give the district the benefit of the equitable incidence of rates which this settlement effects, than to contend for the literal operation of principles which would occasion an abandonment of revenue to which the Government would not assent.

34. The Acting Third Member has recorded his dissent in a separate minute.

(A true Extract.)

(Signed) J. GROSE,
Sub-Secretary.

To the Acting Secretary to Government, Revenue Department,
with copy of Mr. Puckle's Report.

Copy to the Collector of Tinnevelly.
,, to the Director of Revenue Settlement.

1869.

Govt of Revenue,
MADRAS.

PROCEEDINGS, 22ND MAY 1869, NO. 3,614.

Encl.

Received



M A Y.
No. 3,614.

Settlement of river-irrigated villages—
in Tinnevelly District Collector's scheme for;
submitted to Government, with remarks.

No. 1,070.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 22nd June 1872.

Read the following letter from R. K. PUCKLE, Esq., Collector of Tinnevelly, to the Secretary to the Board of Revenue, dated 8th February 1872, No. 35:—

I HAVE the honour to submit, herewith, a scheme for the settlement of the 2nd Division of the Tinnevelly District known as the Palmyrah forest.

2. This division includes sixty-eight villages on the coast, in the Tenkarei and Nanguneri Taluqs to the extreme south of the British possessions in India. Their area aggregates 195 square miles.

3. Though this area is considerable, the revenue is small, amounting to but 38,061 Rupees for land and 42,650 Rupees for trees. The dry land indeed, where cultivated in fields, is so unproductive, and so very lightly assessed at present, that it is difficult to know how to class it. We have entered nothing under 4 Annas, an acre, in any settlement hitherto ; but a 4 Anna rate would considerably raise the assessment of this poorest of poor land. I have had therefore to apply a 3 Anna rate to about 50,000 acres, and even with this, the dry assessment is raised by 1,311 Rupees. The whole country is in fact 'a waste of blown sand, on which nothing will grow but the Palmyrah tree, and on this the population depends.

4. There are, however, a few sheltered spots, where small tanks or ooze springs from the sand hills admit of some wet cultivation, and the assessment of these scattered patches, as might be expected, is most arbitrary and anomalous. The area hitherto classed as irrigated is but 2,756 acres, and of this 1,600 acres are irrigated by baling from ooze springs, and this baling in no respect differs from the baling from wells for gardens : the area thus supplied is now brought under its proper head of "Permanently improved" or first class dry land ; of the remaining 1,156 acres, some are assessed as highly as 13 Rupees, an acre, though no better than lands assessed at 4 and 5 Rupees an acre elsewhere. The irrigated lands of this division though really inferior both in situation and irrigation, may be grouped with the 4th group of the river valley; the rates for the first, second, and third groups of the river valley being inapplicable to this division.

5. Mr. Symonds spent many months in the Palmyrah Forest and has drawn up his scheme with great care. The several processes were worked out by him in communication with me, or with reference to what had been done before in the river valley ; but his result gives too large a reduction for me to propose under existing

circumstances. I have therefore revised Mr. Symonds' figures and have raised his rates so as to reduce the difference between the present and proposed assessment to the smallest possible limits; the result of this revision gives a net increase by settlement of 600 Rupees.

6. Thus the garden lands for which Mr. Symonds proposes five sorts, I have classed in three only, increasing the present assessment by 3,797 Rupees. This is only an increase of account, and is solely attributable to 1,600 acres having been transferred from irrigated to dry as mentioned in paragraph 4.

Present and proposed assessment of Garden lands.

Class.	PRESENT.			PROPOSED.				Remarks.	
	Rate.	Area in Acres.	Assess-ment in Rupees.	Classifi-ca-tion.	Rate.	Area in Acres.	Assess-ment in Rupees.		
				Class.	Sort.				
	RS. A. P.				RS. A.				
	6 11 6	449	3,567	2	1	3 8	* 2,049	7,172	
	2 12 10	541	1,516	2	2	2 8	541	1,352	
	1 10 6	1,042	1,728	2	3	2 0	1,042	2,084	
		2,032	6,811				3,632	10,608	
								3,797	

Present average, Rupees 3-5-7 an Acre.

Proposed average, Rupees 2-14-9 an Acre.

7. For the dry lands, Mr. Symonds proposes a 2 Anna rate as the lowest. I have raised this to 3 Annas, and the assessment is thus increased by 1,311 Rupees instead of being reduced by 1,385 Rupees.

Present and proposed assessment of Dry lands.

Class.	PRESENT.			PROPOSED.				Remarks.	
	Rate.	Area in Acres.	Assess-ment in Rupees.	Classifi-ca-tion.	Rate.	Area in Acres.	Assess-ment in Rupees.		
				Class.	Sort.				
	RS. A. P.				RS. A.				
	0 8 3	83	43	4	5	0 0	83	41	
	0 5 9	16,517	5,910	8	5	0 4	16,517	4,180	
	0 2 3	2,042	286	{ 8	6	0 3	46,943	8,802	
	0 1 11	44,901	5,423				63,543	12,973	
		63,543	11,662					1,311 Rupees increase.	

Present average, Rupees 0-2-11 an Acre.

Proposed average, Rupees 0-3-3 an Acre.

8. The Classification Table in use in the river valley has been applied to the Palmyrah Forest with only two modifications, viz., the addition of a third sort for gardens and a sixth sort for the poorest red sand in dry lands; the table for irrigated lands has remained unaltered.

9. The following Statement exhibits the present and proposed assessment of irrigated lands:—

Number of group.	PRESENT.			PROPOSED.					
	Rate. RS. A. P.	Area in Acres.	Assess- ment. RS.	Classifica- tion.		Rate. RS. A. P.	Area in Acres.		
				Class.	Sort.				
	6 11 5	24	164						
	6 11 0	131	818						
	6 10 9	231	1,581						
	6 5 7	67	415						
	5 6 7	29	154						
	5 6 4	5	26						
	3 9 6	31	111						
		518	3,269	7	2	4 0 0	518	2,072	
	13 6 2	46	618						
	6 12 5	238	1,642						
	6 5 7	24	124						
		308	2,384	7	1	5 0 0	308	1,540	
	7 2 11	17	122						
	6 5 7	1,624	10,279						
	5 6 7	23	117						
	5 6 6	83	401						
	5 6 4	65	351						
		1,812	11,270	7	3	3 8 0	212	742	
	5 6 7	18	94						
	5 6 4	11	61						
	4 15 4	16	76						
	3 9 6	2	8						
	2 7 7	43	107						
		90	346	7	4	2 8 0	90	225	
	5 4 4	2	9						
	1 13 3	26	47						
		28	56	8	5	2 0 0	28	56	
	Total...	2,756	17,325				1,156	4,635	
	Second Crop...	...	2,263				...	749	
	Grand Total...	...	19,588				...	5,384	
								14,204 Decrease.	

Present average, Rupees 7-1-8 an acre. Proposed average, Rupees 4-10-6 an acre.

10. The second crop is proposed to be charged at half the assessment of a

This report has been kept back in expectation of a Commutation rate being sanctioned, but as the Government have passed orders on my former report, I submit this with the figures worked out at my proposed commutation rate.

single crop, the total reduction (including 1,600 acres transferred to the head of Dry) is 14,204 Rupees at the commutation of Rupees 3-2-5, per cottah, as proposed for the River Valley.

11. The Land Revenue is thus lowered by 9,096 Rupees, taking area for area, but allowing 10 per cent. for increase of area by survey and 6½ per cent. for Village Service Fees, the net loss by settlement is 4,390 Rupees or 11 per cent. on the present assessment.

12. The proposed treatment of the palmyrahs has been already reported on—*Vide* Board's Proceedings, No. 1,206, dated 20th March 1871. There are 9,50,000 of these trees in the Palmyrah forest now paying a revenue of 42,650 Rupees; they are charged at varying rates in different villages, but are usually divided into three classes, severally taxed at 2½, 5 and 10 Pies per tree; these figures I propose to alter to 3, 6 and 12 Pies, per tree, this will slightly increase the revenue. Mr. Symonds proposes charging all palmyrahs 6 Pies, irrespective of class, on the calculation that this sum averages half the net profits per tree; but such an assessment might perhaps press unequally, and in some cases swallow up all the net profits and more besides, it would, moreover, have precisely the same financial result as my proposal to raise the 3 classes to 3, 6 and 12 Pies respectively. For, according to the existing classification, the average is 5 Pies, and by my re-adjustment of rates, it will be 6 Pies per tree, an additional pie charged on 950,000 trees will give an additional revenue of 5,000 Rupees.

13. The following Comparative Statement exhibits the present and proposed assessment of this division under all heads:—

	Present assessment in Rupees.	Proposed assessment in Rupees.	DIFFERENCE BY SETTLEMENT.	
			Increase Rupees.	Decrease Rupees.
Dry ...	11,602	12,973	1,311	...
Garden ...	6,811	10,608	3,797	...
Irrigated ...	19,588	5,384	...	14,204
Road Cess ...	1,190	906	...	284
Village Service Cess	...	1,812	1,812	...
Palmyrahs...	42,650	47,650	5,000	...
Total...	81,901	79,333	11,920	14,488

14. The result shows a net decrease of revenue by settlement on Curnam's areas of 2,568 Rupees, but if to this 10 per cent. for increase of area by survey is added, there is a net increase of revenue of 600 Rupees.

15. Mr. Symonds' report and its enclosures are herewith forwarded.

ENCLOSURE No. 1.

From W. A. SYMONDS, Esq., 1st Uncovenanted Assistant for Settlement, to the Collector of Tinnevelly, dated 25th March 1871, No. 51.

INTRODUCTORY.—I proceed to submit the second report on the Settlement of the Land Revenue of Tinnevelly. The first report was submitted by you rather more than two years ago. This report contained a general description of the district, its resources, population, and revenue his-

River Valley.
Palmyrah Forest.
Red Soil Tract.
Black Cotton Plain.

tory, and gave a brief outline of the four divisions into which it naturally falls for Settlement purposes. It also presented a scheme for revising the assessment of the first and, from a purely revenue point of view, most important of these distinct tracts of country, viz., the River Valley. The present report will relate exclusively to the Palmyrah Forest or second Division of the district in order of Settlement.

2. **GEOGRAPHICAL POSITION OF PALMYRAH FOREST.**—Palmyrahs are distributed over the whole length and breadth of the River Valley and the Red Soil Division. They are also to be found in small numbers here and there in the Black Cotton Plain. But the tract of country in which the principal Palmyrah Forest in Tinnevelly is situated, extends from the mouth of the Numbiar to the mouth of the Tambrapurni. This tract comprises sixty-eight villages, with a total area of 195 square miles, and averages 40 miles in length and 10 in breadth. It includes the south-eastern corner of Nanguneri and all that portion of Tenkarei Taluq lying to the south of the River Valley.

3. **CLIMATE.**—An interesting paper on the annual course of the weather in South Tinnevelly, by Captain B. R. Branfill of the Great Trigonometrical Survey of India, will be found in the Appendix. Also a statement shewing the average monthly maximum, minimum and range of the Thermometer, for which I am indebted to the Reverend Doctor Caldwell, whose station (Ediyangudi) is situated in the Palmyrah Forest. These should be consulted for full and exact particulars on the subjects to which they relate. Here, I have only to mention that the climate of south Tinnevelly is drier and hotter than that of any other part of the district.

4. **RAIN-FALL.**—Though the South-west monsoon does not fall in Tinnevelly, the River Valley and portions of the Red Soil tract participate liberally in the benefits of both monsoons, being supplied from the magnificent watershed on the Western ghauts. But the river system of the Palmyrah Forest is *nil*. Hence this tract of country entirely depends upon the uncertain north-east monsoon. And the smallness of the rain-fall in south Tinnevelly, whatever be the cause, is certainly very remarkable. Doctor Caldwell has favoured me with a sight of his register of rain-fall for the last twenty-five years. I have also examined the registers of rain-fall from 1853 to 1862 at no less than nine other stations in Tinnevelly. I cannot well insert these tables in this report. Otherwise they would speak for themselves. And it is not my purpose to dwell upon the meteorology of the subject, which has been ably discussed by Captain Branfill. Yet I cannot refrain from calling attention to its close connection with cultivation. The relation of rain to revenue has never been doubted. Not therefore is it less likely to be overlooked. It will be my duty further on to propose for the unirrigated lands of the Palmyrah Forest, a much lower rate of assessment than it is in contemplation to impose elsewhere. This proposal will mainly be based upon the fact that the annual rain-fall in south Tinnevelly only averages 21 inches, whereas that of other parts of the district averages 35 inches. It is not too much to ask that this fact be duly borne in mind when my proposal is under consideration.

5. **GEOLOGY.**—A note on this subject, with which Doctor Caldwell has been kind enough to furnish me, will be found in the Appendix.

6. **SOIL.**—The soil of which the Palmyrah Forest mainly consists, is better adapted to the growth of this tree than that of any other part of the district. It is a deep loose red loam with a surface of sand. There are a few well protected flats where the sand merely covers the sub-soil, but in the open country, it is several feet deep, and is in some places blown up into hills 20 feet high. Even where the sand is deepest, however, it is the underlying loam which causes palmyrahs to flourish. This loam varies from 5 to 40 feet in depth; when moist, roots of every kind penetrate it easily. It thus affords every facility for the growth of the palmyrah, the long stringy roots of which strike down into it till they reach a supply of water sufficient to enable them to thrive all through the hot weather. Garden cultivation of every kind, the plantain being the staple crop, also flourishes in this red loam. It is chiefly carried on by the help of temporary wells dug along the lower slopes of the "Teries," and supplied by the soakage from them. Paddy is also cultivated to some slight extent in this soil, but it is of small reputation, and the supply of water from the ooze springs of the "Teries" on which it depends, has generally to be eked out by baling.

7. **POPULATION.**—The Palmyrah Forest is mainly, though not exclusively, inhabited by Shanars. There is a colony of Brahmins at Trichendoor, a place on the sea coast, where stands one of the most celebrated temples to Subramanya, in Southern India. At Kulasegarapatam which is also on the sea coast, there is a settlement of Vellalers mostly engaged in trade. Small settlements of Vellalers are also found in many of the more considerable villages. Paraver fisher-

men almost entirely occupy the sea coast. Every village is supplied with its usual complement of artizans, watchers, and village servants. In some places, there are considerable numbers of Pariahs. Some of these are in an independent position. Others are virtually slaves to the wealthier classes. An unusually large proportion of the population consists of Mahomedans, mostly weavers or small traders. The whole of these Mahomedans, with the exception of two or three isolated Patani families, appear to be descendants of Hindu converts to Islam, with a slight intermixture of the descendants of Arab merchants.

8. **SHANARS.**—Shanars however constitute the principal population of the Palmyrah Forest, just as the palmyrah forms its staple article of produce. The climbing of this tree is the caste employment of the Shanars. In these days, however, many Shanars have nothing to do with climbing, but content themselves with owning palmyrahs, or employ themselves in garden cultivation or in trade. The climbing of the palmyrah, for the sake of extracting its juice and boiling it into coarse sugar being a very hard work, not a very remunerative one, and one that can only be carried on for about six months in the year, it is restricted to the poorer class of Shanars. Hence, through the increased wealth and comfort of the Shanars as a class, owing to the extension among them of garden cultivation and their fondness for trade, and also owing to the spread of education among them, and their consequent desire to obtain a more respectable and remunerative means of subsistence, it has become every year more and more difficult for owners of palmyrahs to get people to climb their trees. Great numbers of people migrate for this purpose during the palmyrah season from the southern districts of Travancore to the Tinnevelly Palmyrah forest. Yet even this influx of labourers is insufficient, and if the increased growth of palmyrahs goes on *pari passu* with the increasing comfort of the Shanars as a class, the result will be that a large number of palmyrahs will in course of time, have to be left unclimbed, or as in the open districts to the westward, only for the sake of their leaves. The wood of the full grown palmyrah will always have a certain value for house-building purposes. But owners of trees cannot expect to see the trees they have themselves planted cut down for the sake of their timber, as a palmyrah is said to be of little use for timber till it is at least 100 years old. The natural remedy would seem to be that the Pariahs and other similar castes should be called on to help to climb the trees in default of obtaining a sufficient number of Shanars to do the work. This would be a step in advance to those poorer classes, and would inflict no damage on the Shanars. But here caste ideas intervene. Shanars will not allow the people of a lower caste to have any part in a work which they regard as a privilege peculiar to their own caste, even though they should not be numerous enough to do it themselves; and if they were willing to allow this, it would not be possible for Pariahs, as caste rules go at present, to find a sale for the sugar made by them from the Palmyrah juice, much less for the fresh juice itself.

9. **NATIVE CHRISTIANS.**—In considering the population of the Palmyrah Forest, its most remarkable feature consists in the number of Native Christians it includes. There cannot be fewer than 27,000 Native Christians in this portion of Tinnevelly and the Mission stations, Churches, and Schools that meet the eye every few miles, form a pleasing feature in the otherwise arid and dreary scene. The Christians are mostly Shanars, though not exclusively so, and it is chiefly amongst the Christian portion of the Shanars that the signs of increasing wealth and comfort and of social improvement, which it has been said that the Shanars as a class exhibit, are observable.

10. **REVENUE SYSTEM.**—The system on which the irrigated lands of the Palmyrah forest are assessed, is that known as the Mottafaisal or "lump assessment," with the exception of one village where these lands are assessed on the *Poravu*, or area under the particular tanks it contains. The garden lands pay according to the crop grown, a system as inconvenient as it is unjust. The unirrigated lands are assessed on a rough classification of the soil known as the "Taram" assessment.

11. **LAND REVENUE.**—According to the Agricultural Returns of Fasli 1278 or 1868-69, the year in which the different Settlement Accounts were prepared; there are 2,756 acres of irrigated, 63,543 acres of unirrigated, and 2,032 acres of garden land in the Palmyrah forest. Accord-

ing to the same returns, the revenue realized from these sources in the above year amounted to 19,588 Rupees (including first and second crop assessment) for irrigated, 11,662 Rupees for unirrigated, and 6,811 Rupees (including first and second crop assessment) for garden lands.

12. EXISTING RATES OF ASSESSMENT.—The assessment per acre of single crop wet land in the Palmyrah forest varies from Rupees 1-13-3 to 13-6-2, but averages 5-13-0. That of garden cultivation ranges from Rupees 0-4-10 to 17-11-0. The dry lands pay from 0-1-4 to 0-9-4 per acre.

13. CLASSIFICATION.—The Classification Table of the irrigated lands of the river valley has been applied to those of the Palmyrah forest with the following results:—There is no *bona fide* second crop wet land, and there are only 918 acres of *bona fide* wet land at all in the tract of country under report. Of this extent, 8 per cent. falls in the second class, under the head of Best Red loam; 56 per cent. in the third, under the head of Good Red loam; 23 per cent. in the fourth class, under the head of ordinary Red loam; and the remainder in the fifth, sixth, and seventh classes, under the head of inferior Red loam, Worst Red loam, and Worst Red sand, and Worst Black sand, respectively. The remaining 1,838 acres borne on the Returns of Fasli 1278 as irrigated land have been transferred to the head of Best Permanently Improved, 1,600 acres of this extent being irrigated by baling, in the manner described in paragraph 6, and the rest from small rain-fed tanks. From a settlement point of view both are dry.

14. GROUPING.—Omitting all notice of those intermediate settlement processes which have already been worked out for the whole district, I have only to mention that all the villages of the Palmyrah Forest fall in the fifth group. When the poverty of soil, the deficiency of rain, and the absence alike of means of irrigation, or communication, which characterise this tract of country are remembered, the propriety of such grouping will not be disputed.

15. SCHEME OF SETTLEMENT FOR UNIRRIGATED LANDS.—I find myself under the necessity of soliciting your consent to certain modifications of your Classification Table for the dry lands in Tinnevelly, with the view of adapting the same to the peculiar circumstances of the Palmyrah Forest.

16. The subjoined Table, from which I have omitted such classes and sorts of soil as find no place in the region under report, will show that I desire two changes; first, to provide for the imposition on garden lands of three subordinate rates of assessment, viz., Rs. 2, 1-8-0 and 1; and secondly, of a 2 Anna rate on the worst dry lands. I propose to effect these changes by assimilating the Permanently Improved to the other series in use, and dividing the Red Sand series into six sorts. The latter alteration will obviously oblige me to designate the different sorts of soil simply as first sort, second sort, and so on, instead of, as heretofore, as best, good, ordinary, inferior, worst. But this is not of any consequence.

Classification.		Assess- ment Class.	Rate per acre,
Class.	Sort.		
RS. AS. P.			
2	1	1	3 8 0
2	2	2	2 8 0
2	3	3	2 0 0
2	4	4	1 8 0
2	5	5	1 0 0
4	5	7	0 8 0
5	5	9	0 4 0
8	5		
8	6	10	0 2 0

17. I proceed to justify my proposals. Next to palmyrahs in importance, as a means of subsistence, comes the garden cultivation, in the sandy deserts of South Tinnevelly, the plantain being the staple crop. These gardens are generally found along the lower slopes of the Teries, as the dunes or ranges of red sand hills, constituting the peculiar feature of the Palmyrah Forest, are called. They are irrigated, at the cost of immense labour, by baling from lakes, pools, ponds and wells, depending for supply on the water that percolates down to them through the sand of the Teries. As has been said, their assessment varies from 0-4-10, to 17-11-0, per acre for single crop. No traces exist of even a rough average of incidence, and I purposely refrain from creating one. For an average struck over a series of singularly anomalous variations of assessment would mislead in two ways: first, by raising the apparent value of the poor; and, secondly, lowering that of the better lands. In order to show the necessity, however, for some such modification of the Classification Table as I propose, I may mention the following facts:—Of the sixty-eight villages comprising the Palmyrah Forest, fifty-six contain garden lands. For these, only eight villages pay more than Rupees 3, per acre. Eight more pay less than Rupees 3, per acre, the large number of thirty-one less than Rupees 2, and ten villages less than Rupee 1 an acre. Now it is evident that the application of an uniform rate of Rupees 2-8-0, per acre, to the garden cultivation throughout the Palmyrah Forest would be most unfair in incidence. It is true that this, so far from raising the revenue derived from the above source, results in a reduction of it, amounting to no less than 2,640 Rupees (including first and second crop assessment). And herein lies a striking fresh proof, if any be needed, that settlement necessarily involves reduction. For the application of an uniform rate of Rupees 2-8-0 per acre, to the garden lands of the fifty-six villages under consideration also results in raising the present assessment (including both crops) in no less than forty-four of them by 924 Rupees. The remedy lies, as I conceive, in the adoption of three subordinate rates of assessment as shown in Statement D. (See Appendix) columns 6 and 7 of which have been filled up by myself almost entirely with reference to existing rates of assessment. On no other principle can these lands be treated by a Settlement Officer, unless he chooses to draw untenably fine distinctions, so exceedingly slight are existing disparities. This I am able to affirm of my own knowledge, having travelled over the whole length and breath of the Palmyrah Forest.

18. As for the unirrigated lands of the Palmyrah Forest, I have already said enough to show that they unquestionably labour under the serious drawback to productiveness of want of rain. A perhaps scarcely inferior plea for my 2 Anna Dry rate will be found in the fact that of the 63,543 acres comprising the great bulk of the Palmyrah Forest, 37,272 acres already pay only 1 Anna, 4 Pies per acre, while another 14,117 acres also pay much less than 4 Annas per acre. I am aware that our 4 Anna Dry rate has been characterized as a "mere grass rent," but some of the land on which I notwithstanding propose to impose half 4 Annas per acre is perfectly destitute of vegetation, and the rest is better adapted to the cultivation of trees of slow growth than of pasturage. Cattle might stray, but could never browse upon it. Vast tracts of it are periodically resigned but not registered as Porumboke, and still stand in the names of the original holders, by whom they are regarded as part of their property. It must not be imagined that this is the fault of the Local Revenue Officers. On the contrary, so strong is public opinion upon the point that no one dreams of applying for these lands under existing circumstances. Now nothing can be clearer than that land pays neither Government nor the people while lying waste. Nothing too can be more certain than the fact that some portions of this rain-less tract will not pay to cultivate. Whatever thus remains out of cultivation fulfils a sound commercial principle. But it is not to the interests of Government or people that the productive power of *any* land should be wasted to a clearly appreciable degree. Yet this is just what may be affirmed with regard to very much of the land under consideration. Impose an assessment which it will bear, and no more, and encourage the planting of it by relinquishing all prospective demands in respect of tree-tax, and very much, though I am of course not prepared to say how much, till the experiment has at least had a trial; of this area will become available assets of revenue. It remains for me to solicit particular attention to the map

herewith published. The principle upon which the proportions of cultivated to uncultivated land have been allotted in it are explained in a note to the same. These proportions are founded upon the returns for Fasli 1278 which was a particularly good year from an Agricultural and Revenue point of view.

19. The following Statement exhibits the present and proposed rates of assessment, with the aggregate results, for the dry lands of the Palmyrah Forest:—

PRESENT.			PROPOSED.			
Rate per acre.	Area.	Assess-ment.	Rate per acre.	Area.	Present assess-ment.	Proposed assess-ment.
RS. A. P.	RS.	RS.	RS. A. P.	RS.	RS.	RS.
0 9 4	74	41	0 8 0	74	41	37
0 7 0	1,434	558	0 4 0	1,434	558	359
0 6 11	1,393	417	0 4 0	1,393	417	348
0 5 7	8,326	2,970	0 4 0	8,326	2,970	2,081
0 5 4	920	308	0 4 0	920	308	230
0 5 2	532	257	0 4 0	532	257	133
0 5 0	3,475	1,351	0 4 0	3,475	1,351	870
0 3 4	2,109	429	0 4 0	879	193	220
0 0 0	...	...	0 2 0	1,230	231	154
0 3 0	6,158	1,169	0 8 0	9	2	4
0 0 0	...	...	0 2 0	6,149	1,167	769
0 2 7	339	54	0 2 0	339	54	43
0 2 4	1,511	228	0 2 0	1,511	228	189
0 1 4	37,272	3,880	0 4 0	1,600	137	400
0 0 0	...	..	0 2 0	35,672	3,743	4,457
	63,543	11,662		63,543	11,662	10,294

20. PALMYRAHS.—A monograph on the Palmyrah and its products will be found in the Appendix. The revenue conditions of Palmyrah plantations in Tinnevelly have already been fully described in your letter of 14th December 1870, No. 612, to the Board. Hence I need do little more here than exhibit the approximate results of the application of the scheme of settlement for these trees, submitted by you in the above letter. When the villages of the Palmyrah Forest are dealt with in detail, some alteration of the figures I am about to give may be called for, but at present it will suffice for all practical purposes to treat them roughly *en masse*.

21. There are rather more than nine-and-a-half lacs of palmyras in the tract of country under report, yielding a revenue of 42,650 Rupees per annum. Of those, 9,23,986 stand on cultivated and 41,778 on land unavailable for cultivation. Statement F (See Appendix) contains all further particulars as to the number of trees belonging to each of the four classes into which taxable palmyrahs are divided, the rates of assessment paid, etc. Adding a trifle for growing seedlings, say 350 Rupees, in order to bring the above sum to round numbers, 43,000 Rupees may be assumed to be the tree-tax on the Palmyrah Forest in South Tinnevelly for the next thirty years.

22. FINANCIAL RESULTS.—Excluding Road Cess, the Revenue under revision amounts to 80,711, the proposed assessment to 67,497 Rupees, excluding the several items to be added to it at time of settlement. The transfer of lands irrigated by baling from the head of Wet to that of Best Permanently Improved, involves an unavoidable reduction of 4,560 Rupees, while the transfer to the same head of the area under small rain-fed tanks involves a further reduction of 809 Rupees. The reduction on garden lands amounts to 2,640 Rupees. The aggregate sum sacrificed under each of these heads by the abolition of the charge on second crop, alone amounts to Rupees 6,975-5-6. The actual reduction including both crops, on the *bona fide* wet lands amounts to 4,187 Rupees. The reduction on the dry lands amounts to 1,368 Rupees.

23. Including Road Cess, the revenue to be affected by settlement amounts to 81,901 Rupees. Including an addition of 2,450 Rupees for increase of area by survey (calculated at 10 per cent.) as well as Road and Village Service Cesses, which aggregate 2,526 Rupees, the proposed assessment amounts to 72,473 Rupees. The net reduction by settlement is therefore 9,428 Rupees, or 11½ per cent. of the present assessment.

THESE papers submit a scheme for settling the part of Tinnevelly known as the Palmyrah Forest, including 68 villages and 195 square miles, and yielding a revenue of Rupees 38,061 from land and Rupees 42,650 from trees or Rupees 80,711 altogether.

2. The land hitherto classed as *wet* land includes 2,756 acres, of which Mr. Puckle proposes for good reasons to transfer 1,600 to *dry* as first class, permanently improved.

3. The remainder is now assessed at rates varying from Rupees 13-6-2 to Rupees 1-13-3. Mr. Puckle proposes to group and classify it thus :—

Group.	Class.	Sort.	Rate.	Area.	Assessment.	Present assessment.
			RS. A. P.	ACRES.	RS.	RS.
4	7	2	4 0 0	518	2,072	3,269
	7	1	5 0 0	308	1,540	2,384
	7	3	3 8 0	212	742	about 1,143
	7	4	■ 8 0	90	225	346
	8	5	2 0 0	28	56	56
				1,156	4,635	7,198
Second crop...						749
					5,384	9,461

4. Thus the decrease proposed is Rupees 4,077 or 42 per cent. but most of this appertains to Second crop with regard to which Mr. Puckle said in his Settlement Report on the Tambrapurney Valley: "This is the only district in the Presidency in which two full assessments are charged for two crops grown on the same land in the same year." The decrease on the single crop assessment is 29 per cent.

5. Mr. Symonds proposed to rate 918 acres only as *wet* land and to reduce the assessment thereon, including the charge for second crop, by 54 per cent. The difference between his 918 acres and Mr. Puckle's 1,156 acres consists of land "irrigated by small rain-fed tanks."

6. The Board accept Mr. Puckle's assurance that his group, classes and sorts correspond with those adopted for the river valley.

7. The rates will need alteration with reference to Government Order, 3rd May 1872, No. 716.

8. The *dry* lands re-assessed comprise—

1,600 Acres now classed as <i>Wet.</i>					
2,032	"	"	"	"	<i>Garden.</i>
63,543	"	"	"	"	<i>Dry.</i>
<hr/>					
		67,175			

Mr. Puckle proposes to have a new minimum rate of 3 Annas and to class them thus—

Class.	Sort.	Rate.	Area.	Assessment.	Present
					assessment.
2	1	3 8 0	2,049	7,172	about 13,726
	2	2 8 0	541	1,352	1,516
	3	2 0 0	1,042	2,084	1,728
	5	0 8 0	83	41	43
	5	0 4 0	16,517	4,130	5,910
	6	0 3 0	46,943	8,802	5,709
			67,175	23,581	28,631

There is a decrease of about 44 per cent. on the land now classed as *Wet*, a decrease of 18 per cent. on land now classed as *Garden*, and an increase of 11 per cent. on the land now classed as *Dry*.

In this part of the scheme two modifications have been made in the classification of the valley. A third sort has been added for garden and a sixth sort for the poorest red sand. The latter is evidently necessary, and the Board accept the former.

9. Mr. Symonds proposed to assess at 2 Annas 44,901 acres of land now rated thus:—

	ACRES.	RS.	A.	P.
* The calculations of the present assessment at these rates in paragraph 19 of Mr. Symonds' report and Enclosure 1. 3, seem to be incorrect.	1,230	at	0	3 4*
	6,149	"	0	3 0
	339	"	0	2 7
	1,511	"	0	2 4
	35,672	"	0	1 4
	<hr/>			
	44,901	,	0	1 8

10. It is clear from the facts detailed in the reports that the ordinary method of taking "half the net profit" cannot be applied to these lands, which are mere "wastes of blown sand," and can yield no profit until they are planted. Mr. Symonds gives cogent reasons for his 2 Anna rate and Mr. Puckle gives none for raising it to 3 except that doing so will increase the revenue. If Mr. Symonds is right in thinking that a 2 Anna rate will induce ryots to take up the land and plant it, whilst a higher rate will keep it ownerless and waste the Board would prefer the 2 Anna rate. The amount of revenue involved is small. The Collector will report in detail on this point.

11. With regard to the mode in which the palmyrahs are to be dealt with Mr. Puckle refers to the report recorded with Board's Proceedings, dated 20th

March 1871, No. 1,206. He there said. "This tract comprises 68 villages and will be specially reported on shortly when preparing my data for settlement. It is therefore unnecessary for me to furnish detailed explanations now, though I may mention the outline of my scheme to be demarking in blocks as far as possible the area occupied by trees that can be separately distinguished as the property of any individual or community and after assessing the land at a low rate to issue land puttas for the ground at the foot of the trees and then settle the tree-tax on easy

Reject fractions of Annas, add a trifle for growing seedlings, fix on a round figure near the present assessment.

terms in the mode proposed in No. 1.* Where the trees are much intermixed and conflicting interests are involved demarcation will be impossible, and *I*

must treat the trees as I find them on paper, settling a fixed rental at a round figure for each treeputta without reference to the land for a shorter term of years than in Classes I. and II. say for 10 years, the time that a seedling takes to grow into a taxable tree." Mr. Puckle not only does not attempt to fill out the outlines of this scheme in his present report, but he apparently abandons it altogether, and proposes to divide the trees into 3 classes rated at 3, 6 and 12 Pies. The result is to raise a revenue of Rupees 42,650 to Rupees 47,650 or by 12 per cent. *for the present*, but taking into account the annual increase of revenue realized under the present system a large amount will be sacrificed during the 30 years the settlement is to last.

12. The Board must ask for a fuller report on this subject. The difficulties connected with it are great, but it should be explained why all hope of demarcating much of the forest into blocks and combining a light land assessment with a tree-tax has to be given up. The labour of introducing the assessment by dividing 950,000 trees into three classes will be very great, and unless the practical difficulties in the way are insuperable a uniform assessment on all trees, like that proposed by Mr. Symonds, but a little higher, would be a preferable arrangement. In any case a small proportionate amount should be added to the several puttases on account of seedlings.

13. The Collector has obscured the financial results of his proposals by introducing items such as Road Cess and Village Service Cess which have nothing to do with them. Calculated correctly a present revenue of Rupees 80,711 (increasing annually so far as regards the palmyrahs) will be reduced to Rupees 76,615 or by 5 per cent.

14. Mr. Puckle will now revise his rates with reference to G. O., 3rd May 1872, No. 716, and in reporting the result will treat more fully of the minimum rate to be fixed for dry lands and on the details of the tree settlement. His proposals will then be submitted to Government.

(True Copies and Extract.)

(Signed) J. GROSE,
Secretary.

To the Collector of Tinnevelly, with Mr. Symonds's original letter
and one enclosure, returned.

Copy to the Director of Revenue Settlement.

Exd. G. A. Turton.



1872.

Board of Revenue,

MADRAS.

PROCEEDINGS, 22ND JUNE 1872, NO. 1,070.

Encl.



Received

J U N E.

No. 1,070.

Tinnimelli Settlement.—Remarks passed on scheme submitted by Collector for settling that part of the district known as the Palmyrah Forest; and Collector requested to revise his proposals.

No. 1,679.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 27th August 1873.

Read again Proceedings of the Board of Revenue, dated 22nd June 1872, No. 1,070.

Read also the following letters:—

From R. K. PUCKLE, Esq., Collector of Tinnevelly, to J. GROSE, Esq., Secretary to the Board of Revenue, dated Kadayam, 29th July 1872, No. 323.

IN reply to Board's Proceedings, No. 1,070, dated 22nd June 1872, I have the honour to inform you, that I raised the lowest rate proposed by Mr. Symonds for dry lands in the Palmyra Forest from 2 to 3 Annas an acre, feeling that it was almost immaterial to the people concerned whether they paid part or the whole of the wages of one day's labour as the rent of an acre of land, and having been expressly told by the late Governor, His Excellency Lord Napier, when in this district, that he would never consent to any scheme involving the sacrifice of a single rupee of revenue. Take it altogether, I prefer a 3 Anna to a 2 Anna rate, as the lowest rate in the adjoining villages included in the river valley is 4 Annas, and the slight difference between 2 and 3 Annas will certainly not keep land from being taken up for planting palmyras when it is known that there will be no charge for trees hereafter planted and grown on lands held onputta.

2. The Board have slightly mistaken my meaning in paragraph 14 of their Proceedings; the state of the case in this besides the 67,000 acres of dry land paid for and held onputta, there is as much more that is not paid for, and not held onputta, but which is planted with palmyras chargeable with tree tax at 2½, 5 and 10 Pies per tree. My object is to induce the people to take up the land that the trees stand on onputta, paying besides a certain fixed sum on the trees as quit-rent.

3. The trees are divided into three classes already, so there is no necessity for re-classification, the only alteration I propose to make in the actual charge per tree is in the case of tree owners who decline my terms of quit-rent; then instead of charging 2½ Pies for each leaf bearing, 5 Pies for each male, or 10 Pies for each female tree, I propose to charge 3 Pies, 6 Pies and 12 Pies for these three classes respectively; this will slightly raise the revenue, and give us easier fractions to deal with.

4. The quit-rent I would fix as under. A man now grows on say 2 acres of waste—

	RS.	A.	P.
10 Female trees assessed at 10 Pies	0	8	4
15 Male , at 5 ,	0	6	3
135 Leaf bearing trees assessed at 2½ Pies ...	<u>1</u>	<u>12</u>	<u>0</u>
Total... 2 10 7			

and has besides perhaps 50 or 60 seedlings in various stages of growth.

5. To such a man, I should offer the land at 3 Annas an acre, and allow him to compound for all that stood on the land for an annual quit-rent of Rupees 2-12-0, total for land and trees Rupees 3-2-0 per annum. Should he refuse my terms, I should retain the land as Government waste, and assess his trees as under:—

	RS.	A.	P.
10 Female trees at 12 Pies	0	10	0
15 Male , at 6 ,	0	7	6
135 Leaf bearing trees at 3 Pies	<u>2</u>	<u>1</u>	<u>9</u>
Total... 3 3 3			

and so charge him rather more than the consolidated rate shewn above, besides charging him for his seedlings as they came into bearing from year to year.

6. I am told by those who have lived long in the locality that the proposed system of a consolidated land-tax and quit-rent for trees will be very highly appreciated, and that much trickery and fraud on the part of Curnams, and litigation and uncertainty of possession on the part of the tree-climbing population will thereby be got rid of for ever.

7. The rates for wet land are revised as under, agreeably to Proceedings of Government, No. 716, dated 3rd May 1872.

No. of Group.	PRESENT.			PROPOSED.				Remarks.	
	Rate.	Area in Acres.	Assessment.	Classification.		Rate.	Area in Acres.	Assessment.	
				Class.	Sort.				
	RS. A. P.	RS. A. P.				RS. A. P.		RS. A. P.	
13 6 2	46	618	0 0						
6 12 5	238	1,642	0 0						
6 5 7	24	124	0 0						
	308	2,384	0 0	7	1	7 0 0	308	2,156	0 0
6 11 5	24	164	0 0						
6 11 0	131	818	0 0						
6 10 9	231	1,581	0 0						
6 5 7	67	415	0 0						
5 6 7	29	154	0 0						
5 6 4	5	26	0 0						
3 9 6	31	111	0 0						
	518	3,269	0 0	7	2	5 8 0	518	2,849	0 0
7 2 11	17	122	0 0						
6 5 7	1,624	10,279	0 0						
5 6 7	23	117	0 0						
5 6 6	83	401	0 0						
5 6 4	65	351	0 0						
	1,812	11,270	0 0	7	3	4 0 0	212	848	0 0
5 6 7	18	94	0 0						
5 6 4	11	61	0 0						
4 15 4	16	76	0 0						
3 9 6	2	8	0 0						
2 7 7	43	107	0 0						
	90	346	0 0	7	4	3 0 0	90	270	0 0
5 4 4	2	9	0 0						
1 13 3	26	47	0 0						
	28	56	0 0	8	5	2 8 0	28	70	0 0
Total...	2,756	17,325	0 0	...	...	...	1,156	6,193	0 0
Second crop...	.	2,263	0 0	...	...	...	...	1,077	0 0
Grand Total...	...	19,588	0 0	...	...	...	...	7,270	0 0
Present average per acre...		7 1 8		Proposed average per acre...			6 4 7		

From R. K. PUCKLE, Esq., Collector of Tinnevelly, to J. GROSE, Esq., Secretary to the Board of Revenue, dated Courtallum, 24th August 1872, No. 387.

In reply to your Official Memorandum, No. 1,085, dated 17th instant, I have the honour to inform you, that the rates charged for irrigated land in the Palmyra Forest, (modified for a fourth

12,318
Decrease.

group) are those worked out in paragraph 8 of my letter No. 225, dated 31st May 1872 on the data furnished by Government and not those of my alternative scheme which would reduce them slightly throughout.

In their Proceedings of 22nd June 1872 the Board discussed the scheme submitted by Mr. Puckle for the settlement of the part of Tinnevelly known as the Palmyra Forest. At that time the commutation rates were not fixed, and further discussion appeared to be desirable before the system to be pursued in dealing with the palmyras could be confidently decided on.

2. The decision of Government on the commutation rate was passed on the 6th September last, and the rates as they now stand in Mr. Puckle's table, will be slightly modified. As the Board have not before them the rates for the fourth group as they now stand they request Mr. Puckle to furnish them with a brief Statement of the financial effect of his proposals which appears to be approximately as follows :—

PRESENT.			PROPOSED.			Remarks.
Rate (average.)	Area	Assessment.	Rate.	Area.	Assessment	
RS. A. P. 7 11 10	ACRES. 308	RS. 2,384	RS. A. P. 6 0 0	ACRES. 308	RS. 1,848	Wet.
6 5 0	518	3,269	5 0 0	518	2,590	Do.
6 3 6	212	1,318	3 12 0	212	795	Do.
3 13 6	1156 90	346	2 12 0	90	247½	Do.
2 0 0	28	56	2 4 0	28	63	Do.
Lands which the Collector wishes to transfer to dry.						
6 3 6	1,600	9,952	3 12 0	1,600	6,000	Wet hitherto, Collector proposes to rate as dry "permanently improved."
Second crop.						
		2,263			900	
7 15 1	449	3,567	3 12 0	449	1,683½	Dry 'P. I.'
2 12 10	541	1,516	2 12 0	541	1,487½	Do.
1 10 6	1,042	1,728	2 4 0	1,042	2,344½	Do.
0 2 11	63,543	11,662	0 3 3	63,543	12,973	Dry.
Total...	68,331 1156	38,061 7,373		68,331	30,932½	

6775 50688
This decrease of over 19 per cent. is thus distributed :—

Wet land decrease 23 per cent.

Wet land transferred to garden or permanently improved, dry land decrease 47 per cent.

Dry land formerly garden decrease 19 per cent.

Ordinary dry land, increase 11 per cent. the totals being

	Present.	Proposed.
	RS.	RS.
Dry...	11,662	12,973
Garden	6,811	5,516
Wet to be transferred	11,269	6,000
Wet...	8,319	6,443

3. The decrease is very large in the case of those lands which the Collector proposes to transfer, and the Board see reason to think this transfer injudicious. In the first place it is directly opposed to the practice in other districts. The so-called jouk pachchal or spring-fed irrigation has been dealt with as wet wherever it occurred. In Salem and North Arcot the springs are numerous and have always been held to be a permanent source of irrigation such as constitutes the land watered thereby 'Nanjai.' In Nellore and the Northern Circars the springs are of exactly the same character as these in Tinnevelly being found at the foot of sand hills : they require great labour on the part of those who use them to clear them, but have always been

classed Nanjai. The Board would advocate a low rate, but they would desire to see these lands treated as similar lands in other districts. There may be lands among the 1,600 acres which Mr. Puckle would recommend for transfer which are irrigated by wells sunk by their owners and these if any will be rightly transferred.

4. The rates proposed by Mr. Puckle for the wet land appear to be fair, but as the precise amount of each rate as modified by the adoption of the commutation rate ordered by Government, 6th September 1872, is not before the Board, and as they desire more detailed information on the subject of the present and proposed rates for second crop the Board reserve further remarks until the statement now called for is before them.

5. The Board accept the classification of the dry lands, and the assessment of the bulk of the tract in question at 3 Annas per acre is in their opinion to be preferred to the rates proposed in paragraph 19 of Mr. Symond's Report. The grant of puttas for the land and for the trees thereon, and the benefit which Mr. Puckle proposes to concede of relieving lands and trees so held, from future enhanced demand owing to increase of the number of trees, will, without doubt, cause much land to be taken up; and the inducement seems sufficient and at the same time not too liberal. The Collector's proposal is to raise the tree-tax from 2½, 5, and 10 Pies for each of the three classes of trees respectively to 3, 6 and 12 Pies. In granting puttas for both trees and the land they grow on he would give theputta for the amount due at these rates on the existing stock of trees *plus* 3 Annas an acre for the land and would declare the holder under suchputta liable to no increased rate on account of seedlings coming to maturity during the current settlement.

Mr. Puckle makes a small addition (in the example of the working of this rule in paragraph 4, and 5 of his letter of 29th July 1872) to the tax on existing trees and the 3 Anna land assessment, but does not say what proportion he adopts for this addition; he is requested to explain this. It is observed that the trees have already been divided and classified; the arrangements which the Collector proposes seem to the Board to be the best that can be made, and they are prepared to recommend that the tree-tax be dealt with in the manner laid down by him in his letter last quoted.

(True Copies and Extract.)

(Signed) H. St. A. GOODRICH,
Acting Sub-Secretary.

To the Collector of Tinnevelly.

Copy to the Director of Revenue Settlement.

Exd. G. A. Turton.

PROCEEDINGS, 27th August 1873, No. 1,679.
MADRAS.

1873.

MADRAS.

Proceedings, 27th August 1873, No. 1,679.

Encl.

Received

AUGUST.

No. 1,679.

Tinnevelly Settlement.—Further remarks passed on Collector's scheme for settling that part of the district known as the Palmyra Forest; and Collector requested to forward a brief statement of financial effect of some of his proposals.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 17th July 1872.

Read the following letter from R. K. PUCKLE, Esq., Collector of Tinnevelly, to the Secretary to the Board of Revenue, dated 31st May 1872, No. 225 :—

As required in the Board's Proceedings No. 788, dated 16th May 1872, I have the honour to submit a revised scheme for the settlement of the river-irrigated lands of the Tinnevelly District.

2. The Government, in Proceedings No. 716, dated 3rd May 1872, decided that the commutation rate should be struck on the average prices of twenty years, and selected a particular series of years ending with 1864-65. The average price for this period was Rupees 147-0-9, per Garce, or Rupees 5-0-6, per Cottah, or Rupees 1-1-6, per Harris Cullum, as under :—

Year.	Per Garce.	Per Cottah.	Per Harris Cullum.
	RS. A. P.	RS. A. P.	RS. A. P.
1846...	111 10 8	3 13 5	0 13 5
1847...	105 7 3	3 10 0	0 12 8
1848...	97 14 2	3 5 10	0 11 9
1849...	80 14 5	2 12 6	0 9 8
1850...	78 15 0	2 11 5	0 9 6
1851...	87 3 9	3 0 0	0 10 6
1852...	84 6 5	2 14 6	0 10 1
1853...	112 0 6	3 13 9	0 13 6
1854...	128 8 0	4 6 11	0 15 6
1855...	155 8 0	4 12 7	1 0 8
1856...	136 7 1	4 11 0	1 0 4
1857 ..	159 15 3	5 8 0	1 3 2
1858...	182 5 2	6 4 8	1 5 11
1859 ..	135 15 9	4 10 7	1 0 3
1860...	186 6 10	6 6 5	1 6 4
1861...	176 10 1	6 1 2	1 5 2
1862 ..	194 3 2	6 10 10	1 7 4
1863...	185 0 0	6 5 9	1 6 1
1864...	269 8 0	9 4 6	2 0 5
1865...	272 0 0	9 6 1	2 0 9
Total...	2,940 15 6	100 9 11	21 15 0
Average...	147 0 9	5 0 6	1 1 6

3. Deducting the difference between wholesale and retail prices on the scale allowed in paragraph 53 of my original scheme, viz., 2 Annas a mile for cartage, and $7\frac{1}{2}$ per cent. for merchants' profits, and throwing off odd pies for wastage, the net average for these twenty years is Rupees 125, per garce, or Rupees 4-1-6, per cottah, or 15 Annas per Harris Cullum, which latter figure is 46 per cent. higher than the 11 Anna rate proposed in my original scheme.

4. It is a great misfortune that the series of years selected by Government should contain two years (1864-1865) of famine prices; as these considerably affect the result and raise the average to a figure too near the market price to be safe. Excluding these two years, which happen to be the last in the series, and adopting the two years immediately preceding the series instead, we might obtain a figure that

Prices of Grain during the two years prior to 1846.

Year.	Per Garce.			Per Cottah.			Per Harris Cullum.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
1844 ...	80	6	9	2	15	8	0	10	5
1845 ...	103	0	5	3	8	8	0	12	4

could be safely applied, and I have accordingly worked out an alternative scheme with a commutation rate of Rupees 108, per garce, or Rupees 3-9-0, per cottah, or 13 Annas, per Cullum, which will be found further on.

5. The application of the higher rate, as per Order of Government, gives the following results:—

Soil.	GROSS YIELD.		Value at 15 Annas a Cullum.
	In Madras Measures.	In Harris Cullum.	
Best black loam	1,200	50	46 14 0
Good do.	1,080	45	42 3 0
Ordinary do.	960	40	37 8 0
Inferior do.	840	35	32 13 0
Worst do.	720	30	28 2 0
Best black clay	960	40	37 8 0
Good do.	840	35	32 13 0
Ordinary do.	720	30	28 2 0
Inferior do.	600	25	23 7 0
Worst do.	480	20	18 12 0
Best black sand	960	40	37 8 0
Good do.	840	35	32 13 0
Ordinary do.	720	30	28 2 0
Inferior do.	600	25	23 7 0
Worst do.	480	20	18 12 0
Best red loam	1,080	45	42 3 0
Good do.	960	40	37 8 0
Ordinary do.	840	35	32 13 0
Inferior do.	720	30	28 2 0
Worst do.	600	25	23 7 0
Best red sand	960	40	37 8 0
Good do.	840	35	32 13 0
Ordinary do.	720	30	28 2 0
Inferior do.	600	25	23 7 0
Worst do.	480	20	18 12 0

6. The cultivation expenses expressed in money at 15 Annas a Cullum, may be computed as under:—

	RS.	A.	P.
Seed...	2	10	6
Manure	7	0	0
Weeding	2	5	6
Reaping	2	2	4
Threshing	1	2	10
Stacking, etc.	1	2	10

7. Deducting cultivation expenses (graduated from Rupees 16½ to Rupees 10½ per acre, according to soil and circumstance) from the gross value of the yield, leaves the value of the net produce as under :—

Soil.	Yield in Harris Cullum.	Value at 15 Annas a Cullum.	Deduct cultiva- tion expenses.	Value of the net produce.
Best black loam	50	46 14 0	16 ■ 0	30 6 0
Good do.	45	42 3 0	15 8 0	26 11 0
Ordinary do.	40	37 8 0	14 8 0	23 0 0
Inferior do.	35	32 13 0	13 8 0	19 5 0
Worst do.	30	28 2 0	12 8 0	15 10 0
Best black clay	40	37 8 0	14 8 0	23 0 0
Good do.	35	32 13 0	13 8 0	19 5 0
Ordinary do.	30	28 2 0	12 8 0	15 10 0
Inferior do.	25	23 7 0	11 8 0	11 15 0
Worst do.	20	18 12 0	10 8 0	8 4 0
Best black sand	40	37 8 0	14 8 0	23 0 0
Good do.	35	32 13 0	13 8 0	19 5 0
Ordinary do.	30	28 2 0	12 8 0	15 10 0
Inferior do.	25	23 7 0	11 8 0	11 15 0
Worst do.	20	18 12 0	10 8 0	8 4 0
Best red loam	45	42 3 0	15 8 0	26 11 0
Good do.	40	37 8 0	14 8 0	23 0 0
Ordinary do.	35	32 13 0	13 8 0	19 5 0
Inferior do.	30	28 2 0	12 8 0	15 10 0
Worst do.	25	23 7 0	11 8 0	11 15 0
Best red sand	40	27 8 0	14 8 0	23 0 0
Good do.	35	32 13 0	13 8 0	19 5 0
Ordinary do.	30	28 2 0	12 8 0	15 10 0
Inferior do.	25	23 7 0	11 8 0	11 15 0
Worst do.	20	18 12 0	10 8 0	8 4 0

8. Half of the value of the net produce, subject to a further deduction of 10 per cent. for unprofitable areas now measured into fields by the survey, gives the rates of assessment for the first group of villages :—

Class or Taram.	Value of half the net pro- duce.	Deduct 10 per cent. for unpro- fitable areas.	Remainder.	Rates of assess- ment.		
				RS.	A.	P.
1	15 3 0	1 8 4	13 10 8	13	8	0
2	13 5 6	1 5 4	12 0 2	12	0	0
3	11 8 0	1 2 5	10 5 7	10	0	0
3	9 10 6	0 15 5	8 11 1	8	8	0
5	7 13 0	0 12 6	7 0 6	7	0	0
6	6 15 6	0 9 7	5 5 11	5	8	0
7	4 2 0	0 6 8	3 11 4	4	0	0

9. These rates are alarmingly high, and when it is remembered that 73 per cent. of the area to be dealt with has Paragraph 29 of my original scheme. been classed in the first 3 tarams, such rates could not be applied to a district already higher assessed than any other in

the Madras Presidency. For even when modified to suit the circumstances of inferior villages according to the scale of grouping exhibited in my original scheme, the application of these rates to the lands of the valley would raise the single crop charge 18 per cent. or from Rupees 8,27,764 to Rupees 9,80,682.

10. The area that falls under each money rate when modified by grouping is given below :—

Rate.	Survey area in acres.		Assessment.
	RS.	A. P.	
13 0 0	12,474		1,68,399
12 0 0	18,766		2,25,192
10 0 0	16,972		1,69,720
8 8 0	21,332		1,81,322
7 0 0	16,021		1,12,147
5 8 0	16,131		88,170
4 0 0	7,676		30,704
3 0 0	1,076		5,028
Total...	1,11,048		9,80,682

Alternative Scheme.

11. The application of a commutation rate of Rupees 108, per garce, or Rupees 3-9-0. per cottah, or 13 Annas, per Cullum, gives a far more satisfactory result. The gross yield thus valued is as under :—

Soil.	GROSS YIELD.		Value at 13 Annas a Cullum.
	In Madras Measures.	In Harris Cullum.	
Best black loam	1,200	50	40 10 0
Good do.	1,080	45	36 9 0
Ordinary do.	960	40	32 8 0
Inferior do.	840	35	28 7 0
Worst do.	720	30	24 6 0
Best black clay	960	40	32 8 0
Good do.	840	35	28 7 0
Ordinary do.	720	30	24 6 0
Inferior do.	600	25	20 5 0
Worst do.	480	20	16 4 0
Best black sand	960	40	32 8 0
Good do.	840	35	28 7 0
Ordinary do.	720	30	24 6 0
Inferior do.	600	25	20 5 0
Worst do.	480	20	16 4 0
Best red loam	1,080	45	36 9 0
Good do.	960	40	32 8 0
Ordinary do.	840	35	28 7 0
Inferior do.	720	30	24 6 0
Worst do.	600	25	20 5 0
Best red sand	960	40	32 8 0
Good do.	840	35	28 7 0
Ordinary do.	720	30	24 6 0
Inferior do.	600	25	20 5 0
Worst do.	480	20	16 4 0

12. The cultivation expenses at 13 Annas a Cullum are :—

					RS.	A.	P.
Seed...	...	...	...	...	2	4	10
Manure	...	...	...	...	7	0	0
Weeding	...	...	...	...	1	0	6
Reaping	...	...	...	...	1	13	9
Threshing	...	...	...	...	1	0	3
Stacking, etc.	...	...	...	...	1	0	3
					15	3	7

13. Deducting cultivation expenses (graduated from Rupees 15½ to Rupees 9½ to suit soil and circumstance), the value of the net produce is as under :—

Soil.	Yield in Harris Cullum.	Value at 13 Annas a Cullum.			Deduct cultiva- tion expenses.			Value of the net produce.		
		RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Best black loam	50	40	10	0	15	4	0	25	6	0
Good do.	45	36	9	0	14	4	0	22	5	0
Ordinary do.	40	32	8	0	13	4	0	19	4	0
Inferior do.	35	28	7	0	12	4	0	16	3	0
Worst do.	30	24	6	0	11	4	0	13	2	0
Best black clay	40	32	8	0	13	4	0	19	4	0
Good do.	35	28	7	0	12	4	0	16	3	0
Ordinary do.	30	24	6	0	11	4	0	13	2	0
Inferior do.	25	20	5	0	10	4	0	10	1	0
Worst do.	20	16	4	0	9	4	0	7	0	0
Best black sand	40	32	8	0	13	4	0	19	4	0
Good do.	35	28	7	0	12	4	0	16	3	0
Ordinary do.	30	24	6	0	11	4	0	13	2	0
Inferior do.	25	20	5	0	10	4	0	10	1	0
Worst do.	20	16	4	0	9	4	0	7	0	0
Best red loam	45	36	9	0	14	4	0	22	5	0
Good do.	40	32	8	0	13	4	0	19	4	0
Ordinary do.	35	28	7	0	12	4	0	16	3	0
Inferior do.	30	24	6	0	11	4	0	13	2	0
Worst do.	25	20	5	0	10	4	0	10	1	0
Best red sand	40	32	8	0	13	4	0	19	4	0
Good do.	35	28	7	0	12	4	0	16	3	0
Ordinary do.	30	24	6	0	11	4	0	13	2	0
Inferior do.	25	20	5	0	10	4	0	10	1	0
Worst do.	20	16	4	0	9	4	0	7	0	0

14. Half of the value of the net produce, minus a deduction of 10 per cent. for unprofitable areas measured into fields by the survey, gives the following table of rates :—

Class.	Value of half the net produce.	Deduct 10 per cent. from un- profitable areas.	Remainder.			Rates.		
			RS.	A.	P.	RS.	A.	P.
1 ...	12 11 0	1 4 4	11	6	8	12	0	0
2 ...	11 2 6	1 1 10	10	0	8	10	8	0
3 ...	9 10 0	0 15 5	8	10	7	9	0	0
4 ...	8 1 6	0 12 11	7	4	7	7	8	0
5 ...	6 9 0	0 10 6	5	14	6	6	0	0
6 ...	5 0 6	0 8 1	4	8	5	4	8	0
7 ...	3 8 0	0 5 7	3	2	5	3	8	0

15. These rates, when subject to modification for grouping as in the former case, raise the single crop assessment by only 3 $\frac{1}{2}$ per cent. or from Rs. 8,27,764 to 8,60,466.

16. The area, that falls under each money rate when modified by grouping, is given below :—

Rate.	Survey area in acres.			Assessment.
	RS.	A.	P.	
12 0 0	12,474			1,49,688
10 8 0	18,766			1,97,043
9 0 0	16,972			1,52,748
7 8 0	21,332			1,59,990
6 0 0	16,021			96,126
4 8 0	16,031			72,139
3 8 0	9,352			32,732
Total...	110,948			8,60,466

17. Though the application of these rates to the fields of eight villages (two in each group as per accompanying registers) increases the assessment of nearly every field, the superior lands will not feel the burden, as they will be liberally treated in the matter of second crop, but the inferior lands which yield no second crop will undoubtedly suffer, and these are the very lands that are now over-assessed under the motafysal system at present in force. The officer making the settlement should pay special attention to these, and do his best to afford relief in individual cases of hardship; as a general rule, however, the superior and inferior lands will be found so intermixed in the puttas, that the aggregate future assessment of eachputta will seldom exceed the amount that the puttadar now pays, and after all, the agriculturist looks mainly to totals, and cares but little for the figures that make up the totals.

18. The second crop assessment can hardly now be calculated, as much depends on the area compounded for, and the rates of compounding allowed. In

Paragraphs 72 to 74.

my original scheme, I proposed compounding at $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{3}$ and $\frac{1}{4}$ of the single crop charge according to circumstances: the Government, however, probably with reference to paragraph 74 of my original scheme, which relates to occasional second crop only, sanctioned compounding at $\frac{1}{2}$ and $\frac{1}{3}$ as in Trichinopoly. But taking the peculiar circumstances of some of the highly assessed tracts of this district into consideration, I suggest that the higher as well as the lower rates of my original scheme be retained for application in exceptional cases at the discretion of the officer making the settlement.

19. Regarding the carrying out of the settlement, I beg to refer the Board to my letter, No. 44, dated 1st February 1871, applying for further assistance; for the Collector's duties are specially onerous in this district just now. The large number of Public Works in the hands of Revenue Officers, the pressing demand for land for the Railway, the management of minor estates, the formation of school unions on an unusually extensive scale, and the distribution of irrigation under the Strivycuntam anicut, are all matters requiring prompt attention, and much personal supervision, while the correspondence with all departments and appeals,

petitions and references, seem to increase daily. The Local Fund Work alone demands at least a clear day in every week, and I am Ex-Officio President of three Municipalities. Under these circumstances, it would not be too much perhaps to ask for an additional Sub-Collector, to assist not only in settlement, but in the performance of current duties as well. My Native Assistant, Vencata Chari, who with both the supervisors and all my best field and office hands is now employed under the Director of Revenue Settlement should be allowed to return at once, as I have to raise a party and train fresh hands for the work, and there are many preliminaries to be attended to before the Settlement really begins.

20. When passing final orders, I trust that the Government will issue instructions as to the mode of treating palmyras. A scheme for the settlement of the Palmirah forest, dated 8th February 1872, is now before the Board, but the palmirahs are not confined to any given tract; they are thickly scattered throughout the river valley, and a settlement of that part of the district would be incomplete without determining the future charge on the trees.

ENCLOSURES Nos. 1 to 8.—Statements.

SUBMITTED for the orders of Government with reference to G. O., dated 3rd May 1872, No. 716.

2. Mr. Puckle shows the result of applying an increased commutation rate calculated on a twenty years average to the Settlement of irrigated lands in the Tambrapurny valley. He does not attempt to calculate what the second crop assessment will be, and he assumes that no change is to be made in the original scheme as to dry lands, the assessment on which is to be reduced from Rupees 1,20,381 to Rupees 1,05,080 or by 13 per cent.

3. The average of the twenty years ending with Fusly 1265 gives a commutation rate of 15 Annas a Cullum (instead of 11) and a financial result, not taking into account second crop, of Rupees 9,80,682 instead of Rupees 7,79,985.

4. The present revenue is Rupees 8,27,764 so that the adoption of the 15 Anna commutation rate will raise it by more than 18 per cent. Mr. Puckle thinks this is more than the land can bear and urges that two of the twenty years from which the average is taken viz., 1864 and 1865, being famine years with abnormally high prices, should be omitted from the calculation and the average taken from the twenty years beginning with 1844 and ending with 1863.

5. The commutation rate thus obtained is 13 Annas a Cullum, and the financial result Rupces 8,60,466 or $3\frac{3}{4}$ per cent. more than the present revenue.

6. The Board agree with Mr. Puckle that the two famine years ought to be excluded, and that if they are included the average so obtained will be so high as to be unsafe. They accordingly recommend Government to adopt what Mr. Puckle calls his alternative scheme.

7. By applying the rates in detail to the fields of two villages in each group Mr. Puckle shows that the single crop assessment of almost every field is raised even under this alternative scheme. This will necessitate caution in the case of the inferior fields which grow only one crop.

8. On the better sort of fields, which grow two crops, the total charge will be less than it is at present. Supposing that the adoption of the 13 Anna rate

raises the proposed second crop charge in the same proportion that it raises the proposed single crop charge, the revised second crop charge will be Rs. 3,06,865. or 17 per cent. less than its present amount viz., Rupces 3,70,969.

9. In their order on the Settlement Government mention that Mr. Puckle proposes to allow a permanent composition for a second crop at the rate of one-third in two groups and one-fourth in the other two groups, and they approve of this. Mr. Puckle now states that he intended to compound for two-thirds, half, one-third and quarter of the single crop charge according to circumstances. The Board presume that Government will not object to this. The double-crop land will be sufficiently relieved as it is.

10. When introducing the Settlement, Mr. Puckle will need an additional Sub-Collector to aid him in the current duties of a Collector and Magistrate. This was brought to the notice of Government in Board's Proceedings, dated 24th March 1871, No. 1,209.

11. The Director of Revenue Settlement will be requested to allow the officials referred to in paragraph 19 to return to Tinnevelly as soon as possible.

12. In their Proceedings of the 22nd June 1872, No. 1,070, the Board have approved generally of the scheme for settling the Palmirah Forest but have sent it back to the Collector for further information. Proposals for settling the revenue from scattered palmirahs in other parts of the district were laid before Government in Board's Proceedings, dated 9th August 1871, No. 3,364. Mr. Puckle lays great stress on the desirability of receiving orders on this subject at the same time as he receives orders on the Settlement of the irrigated lands of the valley.

(A true Copy and Extract.)

(Signed) J. GROSE,
Secretary.

To the Chief Secretary to Government, R. D., with eight enclosures.

Copy to the Director of Revenue Settlement.
,, to the Collector of Tinnevelly.

Exd. G. A. Turton.

1872.

BOARD OF SETTLEMENT,
MADRAS.

PROCEEDINGS, 17th July 1872, No. 1,342.

Encl.

Received

JULY.
No. 1,342.

Tinnevelly Settlement.—Letter from Collector forwarding a revised scheme for settlement of river-irrigated lands of the district, submitted for orders of Government, with remarks. Director of Revenue Settlement requested to allow certain officials of Tinnevelly District who are now employed in the Central Office of Director to return to that district as soon as possible.

No. 2,960.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 12th October 1874.

Read the following letter from R. K. PUCKLE, Esq., Collector of Tinnevelly, to J. GROSE, Esq., Secretary to the Board of Revenue, dated Courtallum, 22nd August 1874, No. 416 :—

As required in Board's Proceedings, No. 664, dated 24th March 1874, I have the honor to report on the financial results of the settlement of the Tinnevelly and Tenkasi Taluqs of the Tinnevelly District.

2. These taluqs* have an aggregate area of 460 square miles, and are

* Tinnevelly, 286 Square Miles.

Tenkasi, 174 ,,

Vide Map enclosed.

Kodagan, Palayan, and Suttamalli.

4th, 5th, and 6th anicuts op the Tambrapurni.

3. These taluqs formerly contained 289 villages intermixed with each other in the most bewildering manner; thus, the outer boundary of any particular village might contain detached fields belonging to two, three, five, or more adjoining villages, while often the two or three acres held by a single ryot formed a separate village, or the lands of a village were scattered in detached fragments

Vide Enclosure No. 1.

throughout the taluq anywhere. All this has now been rectified by including some small villages in others of larger size, and by merging in the parent village all lands of whatsoever description that lie within its boundary. This arrangement, with the transfers of villages needed to give each taluq a compact and convenient shape, has reduced the total number of villages from 289 to 143.

4. The settlement of these taluqs was made in Fasli 1283, and the Jummabundi for that fasli was made on the settlement puttias. The demand of these taluqs (as revised in boundary) for Fasli 1282 was, excluding fixed remissions,

	RS.
Tinnevelly	3,24,481
Tenkasi	1,76,888
Total ...	<u>5,01,369</u>

Rupees 5,01,369; for Fasli 1283, it was, including the full assessment of the lands for which fixed remissions were formerly granted, Rupees 5,05,542; there is thus an increase by settlement of Rupees 4,173.

5. As the Board however wish all new cultivation† taken up in Fasli 1283 to be excluded from the calculation, and † 6,639 acres assessed at Rupees 8,832. have directed me to draw a comparison between the assessment of the old cultivation of the holdings of Fasli 1283 at

settlement rates, and the average assessment of the holdings of the past five years

	Rs.
Five years' average assessment of holdings at the old rates ...	5,04,439
Assessment of the old cultivation of holdings of Fasli 1283 at settlement rates	4,96,710
Decrease ...	7,729

at the old rates, I have prepared my accounts accordingly, and the result gives a decrease by settlement of Rupees 7,729. As these Rupees 7,729 may be accepted to represent the real loss entailed by a revision of the revenue system, the causes that mainly contribute to occasion this loss must be shown ; these are—

	Rs.
1. Loss by the assessment of 440 acres transferred from irrigated to dry on a revision of the ayacut or irrigable area under tanks and channels ...	2,155
2. Loss by the assessment of 2,697 acres transferred from individual holdings to village grazing grounds	496
3. Loss by the assessment of 272 acres transferred from individual holdings to village building-sites	288
4. Loss by the assessment of 90 acres transferred from cultivated to waste as the land really formed part of tank-beds	86
5. Loss by the assessment of 473 acres taken up for roads and other public purposes during the settlement	593
6. Loss by abandoning a separate charge for fruit trees growing on tope lands now taken up on land assessment	2,788
Total... ...	6,406

6. To review the results of the settlement in detail, the assessment of thirty-nine villages has been raised, and that of 104 villages has been lowered by the settlement. 36,212 acres of the total area of 47,288 acres irrigated have now been

Only 19,300 acres of double crop were cultivated in Fasli 1282.

compounded as permanent double crop, the charge for 333,764 palmyras growing on 22,413 fields has been consoli-

dated and added to the land-cess. The charge for other* fruit trees growing on

* Tamarind, Mango, Illupei, and Cocoanut. land now charged with land assessment only has been remitted altogether ; the annual fish-rent of 365 tanks has been fixed for the term (30 years) of the present settlement ; the lands held in common in eighty-two villages have been divided among the sharchholders ; and the sharing system has now ceased to exist in all but four villages in these two taluqs. 9,458 puttus have been changed, and the lands entered in these puttus have now been registered in the names of the actual holders ; the boundaries of the building-sites of forty-nine villages have been revised, and the land asked for has been added to them. 2,697 acres have been set aside as grazing ground in twenty-four villages, and the partial assessment known as Varareyayet, Ardamaniyam, Chaturbagam, etc., in favor of communities or individuals, has been abolished, and all Government lands are now charged their full rates of assessment.

7. The principles on which this settlement has been made may be here briefly recapitulated. The five prevailing soils, black loam, sand and clay, and red loam and sand have each been divided into best, good, ordinary, inferior and worst, and the yield of each has been ascertained. Soils of like yield have been bracketed

Vide table of rates enclosed.

together, and X. Classes for irrigated and the same number for dry land have thus

been arrived at; the conversion of the yield of irrigated land into money at the average selling price of ■ series of twenty years, from 1846 to 1865 inclusive, was the next step in the process, but no average was struck for the dry lands, as they were so poor in quality and so very partially cropped, as to render it almost impossible to procure reliable data of outturn; it was therefore thought sufficient to apply to these the rates adopted for Salem and Trichinopoly with some slight modifications to suit local requirements. Having ascertained the gross value of the acreage yield of the rice crop for each class of irrigated land, deduction was made for cost of cultivation, unprofitable areas measured in by survey, etc., and ■ moiety of the net result was taken as ■ standard assessment which after some modification* to suit the circumstances of the

* Paragraph 64 of my letter, dated 11th September 1868.

poorer villages gave a table of rates varying from 12 to 2 Rupees an acre; this

assessment is for one crop only, viz., the Peshanam or five months' crop grown during the prevalence of the north-east monsoon; the Kar or three months' rice crop grown in succession and on the same land as Peshanam in such favored localities as are supplied with water by the south-west monsoon is arbitrarily charged for at $\frac{2}{3}$, $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{1}{4}$ of the single crop rate according to circumstance, and the consolidated assessment for two crops thus arrived at is fixed on the several tracts into which each village has been subdivided by the Settlement officer after a personal inspection of the ground, with reference to relative advantages of soil, situation, irrigation, etc., the fields in any one tract being charged but one rate for irrigated and

Vide map of Piranur enclosed.

one for dry land. In illustration, the accompanying sketch exhibits three tracts A B and C of 78, 82 and 21 acres, the soils of which (technically described as best, good and ordinary black loam, respectively) are ascertained to yield 50, 45 and 40 Harris cullums of unhusked rice, the equivalent of about 55, 50 and 45 bushels each per acre; this yield valued at

1 Bushel = 21 Madras measures.
1 Harris Cullum = 24 do.

the average price of 13 Annas per cullum, or about 1s. 5d. per bushel, is worth

Rupees $40\frac{1}{2}$ an acre in A, Rupees $36\frac{1}{2}$ in B, and $32\frac{1}{2}$ Rupees in C; deducting from these figures the cost of cultivation, etc., viz., Rupees $15\frac{1}{2}$ in A, Rupees $14\frac{1}{4}$ in B, and Rupees $13\frac{1}{4}$ in C, a moiety of the result minus an abatement of unprofitable areas measured in by survey is a close approximation to the rates of assessment for one crop, viz., $12-10\frac{1}{2}$ and 9 Rupees an acre, and these rates apply to all tracts similarly circumstanced in such like villages. In inferior villages, remote situation and poorer irrigation have to be allowed for, and in such, the Rupees $10\frac{1}{2}$ Rupee rate is applied to lands that would be rated at 12 Rupees were they better circumstanced, and in still poorer villages, the 9 Rupees rate is the highest.

8. An eye-sketch has been prepared for every village corresponding with a descriptive account of the particulars of area, soil, situation, irrigation, etc., of

Vide map and descriptive memoir of Piranur enclosed.

each tract, and the sketch and description together furnish ■ simple record of the mode of assessment easily under-

stood by any one wholly unacquainted with settlement. The second crop has been compounded for by entire tracts and not by individual fields, and each tract

is registered as entirely double or entirely single crop ; in those exceptional cases in which a little double-crop cultivation is carried on in scattered patches in tracts that have not been compounded for, three-quarters of the single-crop rate is charged on the area actually cultivated with a second crop, leaving it optional with the ryots to compound hereafter for the entire tract at two-thirds of the 12 Rupees or 10½ Rupees rates, at one-half of the 9 Rupees rate, at one-third of the 7½ Rupees rate, and at one-fourth of the 6 Rupees rate, according as the tract is assessed ; but as a matter of fact, all the higher assessed tracts have been compounded for during settlement, and the tendency on the part of the ryots has been rather to compound for some lands hitherto only growing a single crop than to leave any double-crop lands uncompounded for.

9. As before explained, the former assessment of Tinnevelly was high, and Paragraph 72 of my letter, dated 11th September 1868.

Vide Proceedings of Government, No. 1,289, dated 6th September 1872.

than that of any other district in the Presidency. A charge

of 20 Rupees an acre on 7 per cent.

of 17½ " " on 8 "

of 13½ " " on 10 "

and of 10 " " on 12 " of the area

irrigated direct by tanks or channels is undoubtedly very heavy, and if to this be added the separate charge for the palmyras in cultivated fields, and the new

Rs.
10,716
31,692

village-service cess calculated at an Anna per Rupee of assessment, the sum total reaches a figure that renders it necessary that a high price of agricultural produce should be maintained to enable the ryots to pay.

10. The following statement exhibits at one view the assessment of the area settled.

IRRIGATED.				DRY.			
Rate.	Area.	Assessment.	Average rate per acre.	Rate.	Area.	Assessment.	Average rate per acre.
Rs. A. P.	ACRES.	Rs. A. P.	Rs. A. P.	Rs. A. P.	ACRES.	Rs. A. P.	Rs. A. P.
20 0 0	3,256	65,116	... ... ...	3 8 0	577	2,026	... ... ...
17 8 0	8,757	65,744	... ... ...	2 8 0	590	1,476	... ... ...
13 8 0	4,665	62,977	... ... ...	1 8 0	3,684	5,525	... ... ...
10 0 0	5,654	56,549	... ... ...	1 0 0	12,057	12,063	... ... ...
7 8 0	6,186	46,400	... ... ...	0 12 0	28,280	21,215	... ... ...
6 0 0	3,776	22,655	... ... ...	0 8 0	21,341	10,677	... ... ...
5 10 0	7,477	42,106	... ... ...	0 6 0	28,664	10,788	... ... ...
4 8 0	4,302	19,362	... ... ...	0 4 0	65,514	16,475	... ... ...
4 6 0	4,299	18,830	... ... ...			
3 12 0	534	2,002	... ... ...			
■ 8 0	2,643	9,251	... ... ...			
3 2 0	5	15	... ... ...			
3 0 0	68	203	... ... ...			
Total...	46,622	4,11,210	8 13 1				
Baling...	666	3,040	4 9 0				
Total...	47,288	4,14,250	... ... ...	Total...	1,60,707	80,245	0 8 0

The land supplied by water raised by baling in any particular tract has been assessed at half the rate assigned to the land directly irrigated in that tract, and the dry land interspersed in the irrigation has been rated in the same class of soil as the wet land, so that, if brought under irrigation hereafter, the one rate assigned to the tract may not be disturbed by the change.

11. The gardens which are now assessed as second and third-class dry land are mostly poor, and the settlement has increased their assessment; but it is an undoubted advantage to substitute a fixed charge for the former uncertain assessment which varied according to crop, and to get rid of the anomalous charge of garden second-crop which had the effect of preventing many of these gardens from being cultivated throughout the year.

12. One of the most valuable changes effected by settlement is the consolidation of the charge for palmyras on a very large percentage of the fields; the former system provided for a triennial inspection of these trees, which were classed in three grades according to quality, and assessed at rates varying in nearly every village; the seedlings remained untaxed and were only brought to account when they became old enough to trim for their leaves. The plan that I have now adopted is to take the existing tree-tax on each field and turn it into the nearest round figure, adding the estimated value of the seedlings at the rate of twenty-five per Anna of assessment. We thus arrive at a fixed sum representing the annual tree-tax leviable on that particular field during the term of the present settlement; thus, a field that might have formerly paid Rupees 1-2-7 for taxable trees may have, say, 100 untaxed seedlings growing on it. I convert the former assessment into Rupees 1-3-0, and add 4 Annas more as a royalty for the free use of the seedlings, making a total assessment of Rupees 1-7-0 payable under all circumstances in addition to the land-tax, whether the trees are cut or more are planted, and the amount of this permanent tree-tax is entered in a separate column in the register.

This includes Rupees 1,800, the charge for 727,175 seedlings which were not taxed before the remainder is made up by compounding fractions of Annas and by charging for trees not hitherto brought to account.

We thus get rid of the need of a triennial inspection of 333,764 palmyras, assessed at Rs. 10,716, and bring in an immediate additional revenue of Rupees 3,230 per annum. The remaining palmyras which

are not compounded for, as they stand mostly on Government waste land, remain very much as before, except that each of the three-classes is now charged at the same rate in every village, viz., at 1 Anna 0 Pies or 3 Pies per tree.

13. The arrangements made for providing pasture for the villages at the foot of the hills received the Board's approval in Proceedings, No. 2,300, dated 8th April 1874, in connection with the *Vide my letter, No. 383, dated 24th July 1874.* reservation of forest, and a scheme for the revision of the village establishments of the Tenkasi Taluq is now before the Board.

14. A new form of irrigation register giving the revised area and assessment under each source of irrigation, and a list of the works to be kept in order by

Vide the enclosure of my letter, No. 412, dated 19th August 1874.

This will be separately reported on.

Vide my letter, No. 412, dated 19th August 1874.

Cutcherries of Tinnevelly and Tenkasi of all useless and obsolete records, and to issue new forms of village accounts to the Curnams.

15. There are 27,750 acres of culturable waste in these taluqs, which may hereafter be cultivated in whole or in part, and the assessment of this area, amounting to Rupees 14,500 *plus* the charge for a second crop on some lands now

* These will be separately reported on.

rated as single crop, and the surcharge on Inam* lands found to measure more than ten per cent. in excess of the areas shown in the Inam registers, represent the available assets of revenue in excess of the settlement now made.

ENCLOSURE No. 1.—List of alterations in boundary of the villages of Tenkasi and Tinnevelly Taluqs.

ENCLOSURE No. 2.—Table of Rates.

ENCLOSURE No. 3.—Sketch-map of Tinnevelly and Tenkasi Taluqs.

ENCLOSURES Nos. 4 and 5.—Map and Descriptive Memoir of Piranur.

MR. PUCKLE in the foregoing letter reports the result of his settlement measures in the Tinnevelly and Tenkasi Taluqs, and the Board in submitting it will briefly touch upon each item of work accomplished.

2. *Amalgamation and Rectification of Village Limits.*—There were formerly 289 villages spread over this tract of country, but the lands of one village were to be found within the limits of several adjoining villages; the fields being in fact scattered in all directions. Then, again, the villages were frequently unduly small. This has now been set right, lands have been assigned to the village in which they are actually situated; small villages have been clubbed so that the total number is reduced to 143, and the taluq boundaries have been made symmetrical. This is certainly an arrangement that must have been long needed. In future the Collector should show the beriz and the population of the villages amalgamated, as the Board apprehend that in some cases the clubbing may have gone too far.

3. *Financial Results of the New Rates.*—In paragraph 5, Mr. Puckle shows that deducting the area newly taken up, and leaving ordinary remissions out of the

	RS.
* Old five years' average	5,04,439
At new Settlement rates... ...	4,96,710

7,729

question, the new settlement yields a decrease* of Rupees 7,729 when compared with the average revenue of the preceding five years at the old rates. But this is not exactly the comparison

the Board asked for. The new assessment and the old should have been compared upon the same identical area, so that the effect upon precisely the same data could have been seen at once. The average of the previous five years is hardly trustworthy, as two bad seasons would unduly lower the results and fictitiously enhance those of the new settlement. In future, the old and new rates on the same occupation should be given. Mr. Puckle gives the details comprising the sum of Rupees 7,729 foregone, and the Board observe that as regards the first item "Lands transferred from wet to dry," there has probably been a considerable gain on the credit side of the account by lands transferred from "dry" to "wet."

4. *Measures carried out during the Progress of the Settlement.*

(1.) The second-crop assessment has been compounded for in the case of 36,212 acres out of the entire irrigated area of acres 47,288, and the charge for 333,764 palmyra trees growing on 22,413 fields has been consolidated and added to the land-cess, as will be noticed hereafter.

(2.) The fish-rent for 365 tanks has been permanently fixed for the next thirty years.

(3.) The Samudayam lands have been divided in eighty-two villages.

(4.) Alterations have been made in 9,458 puttus and the lands entered in the names of the real occupants.

(5.) The village-sites have been revised and added to where needed in forty-nine villages.

(6.) Grazing ground has been allotted to the extent of 2,697 acres.

(7.) Old-fashioned remissions in favor of certain classes or individuals have been abolished.

The utility of the above measures is unquestionable.

5. *Mode of framing the New Settlement.*—The usual procedure as authoritatively laid down has been followed throughout; the only peculiar features being that five "sorts" have been adopted instead of three for each description of soil, and that the classification has been made by blocks or tanks, as shown in the maps accompanying. The Board remark that in the case of the villages under the Sittar no land is classed either as "Best" or "Good" Black loam, so that the classification there at all events is not too stringent. One more deviation from established rule was the arbitrary adoption with some modifications of the dry rates assigned for Salem and Trichinopoly. This Mr. Puckle explains was owing to the great difficulty in obtaining trustworthy estimates of the yield on dry lands.

6. Mr. Puckle has evidently taken much pains with the compounding for the second crop, so as to make the demand on wet lands a consolidated invariable cess. The ryots have entered into the arrangement as above shown to a very large extent, and Mr. Puckle says his principle has been rather to compound for some lands hitherto only growing a single crop than to leave any double-crop lands uncompounded for. It may appear somewhat singular that the rate of composition should commence with two-thirds of the first crop when in other districts one-third is the highest rate. But owing to the peculiar circumstances

of Tinnevelly, the second-crop charge has been sanctioned at three-fourths of the first crop. By this means the highest single-crop wet rate of 12 Rupees becomes, when the second crop is compounded for at two-thirds, a consolidated cess of Rupees 20, so that the Tinnevelly ryots will still pay higher rates than those of any other province, though the old rates have been greatly reduced. The average by the present settlement for wet lands stands at Rupees 8-13-1 per acre; the districts next in rank being Coimbatore at Rupees 7-11-5, and Cuddapah at Rupees 6-15-2.

7. Mr. Puckle has been lenient with fields irrigated by baling, as he has assigned thereto *half* the assessment of the lands directly irrigated in the same tract; the usual course has been either to allow one-fourth of the assessment as a recompense for the labor, or 1 Rupee per acre as in Nellore.

8. The question of the palmyra-tree taxation, a very important one in this district, has formed the subject of much discussion; but the matter has now been settled in accordance with the scheme submitted by Mr. Puckle, and approved of by Government. The existing tree-tax on each field is taken as the basis, and to this is added 1 Anna for every twenty-five seedlings, and this sum *plus* the original land assessment forms the fixed cess to be paid for the next thirty years, without any tedious and untrustworthy personal inspections and enumerations as heretofore.

9. The village memoir is very full and complete, and the Settlement Department should adopt the plan of entering the names of the village officers in their descriptive memoirs, as it may prove a very useful record.

10. The report is full of evidence that the energy of Mr. Puckle and the conscientious activity with which he has devoted a very exceptional amount of personal superintendence to every part of the work have had the best possible results.

(A true Copy and Extract.)

(Signed) J. GROSE,
Secretary.

To the Acting Secretary to Government, Revenue Department,
with five original enclosures to be returned.

,, the Collector of Tinnevelly.

Copy to the Director of Revenue Settlement.

Exd. W. H. French,

BOARD OF REVENUE,
MADRAS.

1874.

PROCEEDINGS, 12TH OCTOBER 1874, NO. 2,960.

Enc.

Received

OCTOBER

No. 2,960.

Settlement—of the Tinnevelly and Tenkasi Taluks of District.—Collector's report on financial results of —, submitted to Government with remarks.

No. 1,217.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 10th May 1875.

Read the following letter from R. K. PUCKLE, Esq., Acting Director of Revenue Settlement, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Tiruvattore, 14th April 1875, No. 724-21 :—

I HAVE the honor to forward the Special Assistant's report on the settlement of the villages under the Streeviguntum anicut on the southern bank of the river in the Tenkarai taluq of Tinnevelly received through the Collector.

2. I forward the report on these villages without waiting for the completion of the rest of the taluq, as the Government are no doubt anxious to know what returns to expect from the Streeviguntum anicut lately constructed from Loan funds at a cost of 10 lakhs of Rupees.

3. This anicut crosses the Tambrapoorni 7 miles below the Maradur anicut, which was till recently the last work on the river, and is calculated to irrigate 40,000 acres. A part of this area was already scantily irrigated by the Maradur system of works, but so many tanks had to be filled before the last got its water that Tenteriperi, now the most flourishing village under the Streevaygundum anicut, used to harvest its crop in June, or from three to four months later than the villages a few miles higher up.

4. The gain by improved irrigation to this village alone with its 2,000 acres of irrigated land is enormous, but the gain is well deserved, for it was the energy of Tenteriperi villagers that immediately brought about the construction of the Streeviguntum anicut.

5. The Board may remember that a trial cut was made from the river to the great Kadamba tank in 1868, with Board's Proceedings, dated 10th January 1868, money subscribed by the ryots. The No. 165.

Tenteriperi people first started that scheme, they furnished much of the labor, and exerted themselves to the uttermost to finish the work ere the freshes came down in June; the result was most successful, before a stone of the anicut was laid, the southern head-slue was built, and the outline of the present main channel was cut as far as the Kadambae tank without any cost to Government.

6. Since 1868 the character of Tenteriperi and of the adjoining villages has changed entirely ; lands which a few years ago were scantily cropped and hardly worth cultivating are now daily increasing in value. Cultivation is extending further and further east, the drainage channels and other special fund works approved of by Government in Proceedings, No. 302, dated 25th February 1875, will do much towards getting rid of the salt and soda that impoverish the lower levels, a return of 7 per cent. on the moiety of the outlay of ten lakhs apportionable to the southern bank of the river has been secured this year, and the reduction of revenue that must have been made by the settlement of a tract of country formerly much over-assessed with regard to its then poor irrigation has been saved, and the assessment has been brought up to the average (11 Rupees an acre) of the older irrigated tracts in the Tambrapooni Valley.

7. Altogether a lakh of Rupees (40,000 Rupees by ryots' subscriptions and 60,000 Rupees by the sale of waste lands) has been raised and expended in this limited area over and above departmental outlay, and the officer who laid out this supplemental lakh of Rupees and who now submits the financial results of the labors of the Public Works and Revenue officers is Vencatachariar of the Settlement Department, now Special Assistant to the Collector of Tinnevelly.

8. A glance at the accompanying map will show the relative qualities of the irrigated lands ; the best, colored green, lie under the great Kadambae tank, now a perennial source of supply, and are assessed at Rupees 15-12-0 an acre ; the dotted green adjoining this and the entirely yellow tract under the Ammappuram tank are the next best assessed at Rupees 13-8-0, then come the lined green and dotted yellow assessed at Rupees 10, then the lined yellow assessed at Rs. 7-8-0, and finally the combined yellow lines and dots assessed at Rupees 6 and under ; in all five grades from the best land of Tenteriperi to the salt swamp below Trichendur. The area left blank in the map is dry, but this will be more or less irrigated in the course of years to come.

9. The area affected is 55 square miles comprising twenty-eight villages with a revenue of Rupees 93,072 last year. This revenue has been now raised by settlement to Rupees 1,31,435 or by Rupees 38,363. The Special Assistant draws a comparison between the net average revenue of the past five years and that now determined by settlement, and adds to the difference some Rupees 20,000 that would probably have been struck off by settlement had the anicut not been built, and thus shows a net gain of Rupees 65,000 by the construction of the work ; but, for practical purposes, it will be sufficient to take merely the difference between last year's and this year's assessment, and apply it to a moiety of the outlay on the work. Rupees 38,363 gives a return of upwards of 7 per cent. on an outlay of 5 lakhs of Rupees.

10. The villages on the north bank of the river, to which the other moiety of the cost of the work is apportioned, are now under settlement, and I anticipate that their return will be nearly, if not quite, as good as that now reported.

11. In my estimate of the probable returns from the Streeviguntum anicut embodied in Board's Proceedings, No. 1,352, dated 18th July 1872, I

calculated that an additional assessment of Rupees 22,527 might be imposed on the lands then under wet cultivation on the southern bank of the river, assessed last year at Rupees 85,912 deducting fixed remissions, now assessed at Rupees 1,15,676. The additional assessment now actually imposed on these lands and on the waste taken up at settlement is Rupees 29,764. The Special Assistant gives it as Rupees 28,421 in the marginal note in paragraph 16 of his report, but he there takes the average of the last five years deducting fixed remissions Rupees 363 and Rupees 706 the assessment of land thrown into porumboke at the settlement. I have made the comparison between the last year's beriz deducting only fixed remissions, and have shown the settlement figures *minus* the assessment of the lands thrown into purumboke. In Appendix A he shows that the area of two villages and the lands supplied by baling were omitted from my estimate; these are now assessed at Rupees 4,000, and adding this sum to the estimate, the new assessment of the old irrigation differs from the estimate by only Rupees 3,237. The remaining Rupees 8,599 represents the increased assessment of dry lands.

12. The area now held onputta is as much as the people can manage with the present scanty labor supply, but as population increases and the entire area commanded is irrigated, there will be an ultimate further increase of revenue of Rupees 49,495, which with the Rupees 38,362 brought to account this year and the increase of Rupees 7,422 already brought to account between faslies 1279 and 1283, or subsequent to the first cut being made from the river and prior to the settlement, will give Rupees 95,279, or 19 per cent. on the outlay on the southern bank of the river. This per-cent-age is in excess of the estimate and allows of the returns from the northern bank being ratably less than those now reported to make up the total of 16 per cent. provided for in the estimate.

13. Having shown the results on one side of the river to be favorable to the anicut scheme, I will proceed to explain the method on which the settlement of the lands has been made.

14. The tract now reported on has engaged my special attention as a settlement officer from the date of my joining the Tinnevelly district in 1866. The desolation of the country round and about Trichendur, the high assessment of the so-called irrigated lands of Tenteriperi and Ammappuram, the scanty water-supply in the tanks, and the apparent feasibility of irrigating the whole country from a new anicut on the river induced me to make inquiries which led to the revival of Colonel Horsley's scheme submitted nine years before, but set aside for want of funds about the time of the meeting. In 1868 Lieutenant Shephard, R.E., was deputed to revise Colonel Horsley's scheme; and, as I was then engaged on the preliminary valuation of the lands now reported on, I was able to accompany Lieutenant Shephard over the villages and furnish him with some of the information he needed. Later I accompanied Lieutenant Shephard on a second tour round these villages, and with him prepared the estimate of financial results quoted above. In the meantime the ryots' subscriptions were spent in making the first cut from the river; the anicut work commenced, the settlement scheme was matured, and as the lands were laid out for assessment and the future charge was determined, the right of occupancy of some of the waste lands was sold,

and the money expended on securing the water-supply of the lands on which the money was raised. Settlement and public works were thus enabled to advance hand in hand; the works are now nearly completed, and the settlement of the area commanded by the anicut on both sides of the river will be finished and reported on before the close of this fasli.

15. The villages now reported on are twenty-eight in number, formed by the amalgamation of thirty-seven old villages. Of these four were uninhabited, and the remainder were so exceedingly small or intermixed with those in which they are now merged that their amalgamation could not be avoided; four villages of unwieldy size have been subdivided to suit the requirements of the people.

16. The soil is mostly black loam along the bank of the river, but where the channels bend southward and skirt the red sand hills, locally known as the terei, the face of the country is changed and the soil is entirely red.

17. In the accompanying map the black soil series is colored green, and the red soil series yellow. I had originally laid out these villages in the second, third, and fourth groups, but the construction of the anicut enabled me to raise all to the second group; the average assessment of the irrigated lands is now Rupees 10-13-2 an acre, which is almost identical with the average arrived at, Rupees 10-14-9, for the river-fed lands of the Tinnevelly taluk higher up the stream.

18. The second-crop charge has been compounded on 9,000 of the 10,455 acres dealt with. Seventy-three per cent. of the irrigated area has been assessed at 10 Rupees and upwards, viz., 19 per cent. at Rupees 15-12-0, 20 per cent. at Rupees 13-8-0, and 34 per cent. at 10 Rupees an acre; the assessment of the dry lands intermixed with the irrigation has been raised in consideration of the advantage that they gain by moistened soil and better climate, and their average assessment is now 10 Annas 4 Pies an acre. The following table exhibits the areas that fall in each money rate:—

IRRIGATED.				DRY.			
Rate.	Area in Acres.	Assessment in Rupees.	Average rate per Acre.	Rate.	Area in Acres.	Assessment in Rupees.	Average rate per Acre.
RS. A. P.				RS. A. P.			
15 12 0	1,968	31,001		3 8 0	317	1,109	
13 8 0	2,085	28,150		2 8 0	287	716	
10 0 0	3,530	35,301		1 8 0	321	482	
7 8 11	1,558	11,681		1 0 0	3,216	3,216	
6 0 0	657	3,950		0 12 0	4,451	3,338	
5 10 0	97	547		0 8 0	8,304	4,152	
4 8 0	558	2,514		0 6 0	3,259	1,222	
3 0 0	2	7		0 4 0	2,192	548	
				0 3 0	614	115	
Baling ...	10,455	1,13,151	10 13 2				
	771	8,386	4 6 3				
	11,226	1,16,537			22,961	14,898	0 10 4

19. The Samoodayam or common lands have been divided with the consent of the shareholders, and the sharing system has now ceased to exist in these villages.

20. Three hundred and fifteen acres, assessed at Rupees 706, have been deducted for village sites, roads, and channels, but no lands have been specially set aside for pasturage, as there are large tracts of waste in the neighbourhood.

21. The charge on 569,368 of the 8 lakhs of palmyras standing on the ryots' holdings has been consolidated and added to the land assessment of the fields on which these trees stand in the manner approved by Government in paragraph 3 of Proceedings, No. 360, dated 5th March 1875. There remain now but 240,421 palmyras liable to be separately charged with tree tax, and the tax on these will be levied in future at 1 Anna or 6 Pies, or 3 Pies per tree according to class. The revision of the assessment of these trees has brought in an immediate increase of revenue of Rupees 1,126.

22. Nine hundred and twenty-five puttus were transferred during the settlement, and the lands supplied by baling have been assessed at half the rates assigned to the lands irrigated by direct flow in the block in which they are situated. The lands supplied by ooze springs from the terei have been carefully treated, and their former high rates of assessment have been generally reduced.

23. A village service cess of 1 Anna per Rupee of assessment has been imposed.

ENCLOSURE No. 1.

From W. H. COMYN, Esq., Acting Collector of Tinnevelly, to R. K. PUCKLE, Esq., Director of Revenue Settlement, dated Iruvappapuram, 27th March 1875, No. 271.

I HAVE the honor to forward the Special Assistant's report (with enclosures) on the settlement of the twenty-eight villages under the Streeviguntum Anicut on the south side of the river.

2. The report is full and clear, and, as you are more intimately acquainted with the subject than I am, I do not propose to make any comments on it.

3. The Special Assistant informs me that his report on the settlement of the dry villages and palmyra forest is under preparation, and will be ready in a few days, when it will be forwarded to you.

(True Copy.)

(Signed) R. K. PUCKLE,
Acting Director of Revenue Settlement.

ENCLOSURE No. 2.

From T. VENCATA CHARRIAR, Special Assistant to Collector for Settlement, to W. H. COMYN, Esq., Acting Collector of Tinnevelly, dated Streevaygundum, 24th March 1875, No. 7.

I HAVE the honor to report on the Revenue Settlement of the villages under the Streevaygundum anicut on the southern side of the Tambrapoorni river in the Tenkarai taluk.

2. The accounts of these villages were worked up with the following results:—
3. *Village Boundaries.*—These villages are now twenty-eight in number, formed by the amalgamation and sub-division of thirty-seven old villages, as under.

PARTICULARS AS PER JAMABANDI OF FASLI 1283.					
Names of Settlement Villages.	Names of Jamabandi Villages.	Portion merged.	Cultivated area of Government lands.	Assessment.	Remarks.
1. Terukalur...	1. Terukalur Sikilar-palli.	All.	ACRES. 150	RS. 1,973	A small uninhabited village forming part of the new village of Terukalur.
	2. Parkalam ...	Part.	260	311	Fragments of villages forming part of the new village of Terukalur.
	3. Terukalur Vada-malpalli.	Do.	115	1,199	
	4. Temankulam ...	Do.	4	29	
	Ullurshanpattu ...	Do.	104	73	
	Mavadipannai ...	Do.	25	21	
	Virulaperi ...	Do.	...	...
	Terukalur Sini-aiyanpulli.	Do.	150	1,202	A fragment of a small uninhabited village forming part of the new village of Terukalur.
	Total...	.....	808	4,808
2. Kadayano-dai.	5. Kadayanodai ...	Part.	102	1,091	A fragment of a village interspersed in the fields of Kadayanodai.
	Mavadipannai ...	Do.	97	335	
	Total...	.....	199	1,426
	6. Mavadipannai ...	Part.	126	115	
3. Mavadipan-nai.	7. Kurangani ...	Do.	130	108	A fragment of a village interspersed in the fields of Mavadipannai.
	Mela Tenteriperi..	Do.	7	12	
	Total...	.....	263	235
4. Tenteriperi Kasbah.	8. Kila Tenteriperi...	Part.	635	6,893	Fragments of villages forming the new village of Tenteriperi Kasbah.
	Mela Tenteriperi...	Do.	90	173	
	Terukalur Vada-malpalli.	Do.	1	23	
	Terukalur Sini-aiyanpulli.	Do.	40	553	
	Total...	.....	766	7,642
5. Tenteriperi Kurukattur.	9. Mela Tenteriperi...	Part.	710	6,723	Fragments of villages forming the new village of Tenteriperi Kurukattur.
	Rajavati ...	Do.	4	3	
	Kurangani ...	Do.	5	8	
	Total...	.....	719	6,734

PARTICULARS AS PER JAMABANDI OF FASLI 1283.					
Names of Settlement Villages.	Names of Jamabandi Villages.	Portion merged.	Cultivated area of Government lands.	Assessment.	Remarks.
6. Tentiruperi Rajavati.	10. Rajavati Mela Tentiruperi... Kurumbur Kila Tentiruperi... Kachanavilai ... Tirukalur Siniayanpulli.	Part. Do. Do. Do. Do. Do.	ACRES. 79 337 16 288 1 23	RS. 66 4,636 110 4,451 2 174	Fragments of villages forming part of the new village of Tentiruperi Rajavati. A fragment of a small uninhabited village forming part of the new village of Tentiruperi Rajavati.
	Total ...		744	9,439	
	Kila Tentiruperi..	Part.	480	6,123	
	11. Kachanavilai ... 12. Piravur	Part. All.	271 336	657 646	A petty village within the boundaries of Kachanavilai.
	Kila Tentiruperi..	Part.	19	23	A fragment of a village interspersed in the fields of Kachanavilai.
	Total...		626	1,326	
	Mavadipannai ...	Part.	498	1,018	The southern portion of the old village of Mavadipannai now forms this new village.
10. Nalumavadi.	13. Nalumavadai ... Nallur Kurumbur 14. Panikanadankudi Yiruppa.	Do. Do. Do. Do.	471 13 ... 302	1,016 11 ... 797	Fragments of villages interspersed in the fields of Nalumavadi.
	Total...		786	1,824	
	15. Angamangalam... Alagappapuram...	All. Do.	290 ...	1,650 ...	A small Inam village adjoining Angamangalam.
	16. Kurumbur Panikanadankudi-yiruppu. Nalamavadi ...	Part. Do. Do.	88 10 63	48 94 249	Fragments of villages interspersed in the fields of Angamangalam.
	Total...		451	2,041	

		PARTICULARS AS PER JAMABANDI OF FASLI 1283.			
Names of Settlement Villages.	Names of Jamabandi Villages.	Portion merged.	Cultivated area of Government land.	Assessment.	Remarks.
12. Sugantalai.	17. Sugantalai... ...	All.	ACRES. 210	RS. 2,241	A petty village adjoining Sugantalai.
	18. Varandivayal Shanputtu.	Do.	543	1,991	Small uninhabited villages adjoining Sugantalai.
	19. Marantalai ...	Do.	29	362	
	20. Varandivayal Perumpattu.	Do.	74	454	
	Kurumbur... ...	Part.	8	86	Fragments of villages interspersed in the fields of Sugantalai.
	Attur... ...	Do.	6	65	
	Mela Tentiruperi.	Do.	3	21	
13. Melattur ...	Total...	.....	873	5,220	
	Attur... ...	Part.	301	2,129	Fragments of villages forming the new village of Melattur.
	21. Koluvanallur ...	Do.	114	1,052	
	Total...	.....	415	3,181	
14. Attur Kasba.	22. Attur... ...	Part.	1,265	11,587	A fragment of a village interspersed in the fields of Attur.
	Kolavanallur ...	Do.	13	114	
	Kumarapannai ...	Do.	8	103	A fragment of a small uninhabited village interspersed in the fields of Attur.
	Total...	.....	1,286	11,804	
15. Senamangalam.	Koluvanallur ...	Part.	6	70	Fragments of villages forming part of the new village of Senda-mangalam.
	Palayakayal ...	Do.	305	130	
	Attur	Do.	953	7,398	A fragment of a small uninhabited village forming part of the new village of Senda-mangalam.
	23. Kumarapannai ...	Do.	70	927	
16. Kayalpattanam Vadabagam.	Total...	.....	1,334	8,525	
	24. Kayalpattanam Sil-laraipalli.	Part.	500	496	Fragments of villages forming the new village of Kayalpattanam Vadabagam.
	25. Kayalpattanam Talukarpalli.	Do.	288	350	
	Total...	.....	788	846	

		PARTICULARS AS PER JAMABANDI OF FASLI 1283.			
Names of Settlement villages.	Names of Jamabandi Villages.	Portion merged.	Cultivated area of Government land.	Assessment.	Remarks.
17. Kayalpattanam Tenbagum.	Kayalpattanam-Tulukarpalli. Kayalpattanam Sillaraipalli.	Part. Do.	ACRES. 542 20	RS. 248 15	Fragments of villages forming the new village of Kayalpattanam Tenbagum.
	Total... ...	... ...	562	263	
18. Nallur ...	26. Nallur Viramanikam ... Pudukudi Shampattu. Kurumbur... ...	Part. Do. Do. Do.	304 14 4 212	1,373 37 27 498	Fragments of villages interspersed in the fields of Nallur.
	Total... ...	... ...	534	1,930	
19. Kanam ...	27. Kanam 28. Mulapuli 29. Pudukudi Shampattu. 30. Viramanikum ... Ammanpuram ... Nallur Kurumbur... ... Kila Tentiruperi.	All. Do. Part. Do. Do. Do. Do. Do.	207 179 104 165 0 10 9 47	969 1,107 601 373 137 24 118 462	A petty village adjoining Kanam.
	Total... ...	... ...	730	3,791	
20. Ammanpuram.	31. Ammanpuram ... Kila Tentiruperi. Viramanikam ... Mulakarai... ... Pudukudi Shampattu.	Part. Do. Do. Do. Do.	640 4 22 9 ...	6,011 47 17 47 ...	Fragments of villages interspersed in the fields of Ammanpuram.
	Total... ...	... ...	675	6,122	
21. Mulakarai...	32. Mulakarai... ... Pudukudi Kila Tentiruperi. Ammanpuram ...	Part. Do. Do. Do.	202 44 22 9	1,752 286 91 137	Fragments of villages interspersed in the fields of Mulakarai.
	Total... ...	... ...	277	2,266	
22. Nattakulam.	Manakadu Kila Tentiruperi...	Part. Do.	302 142	109 508	Portions of villages forming the new village of Nattakulam.
	Total... ...	... ...	444	617	

PARTICULARS AS PER JAMABANDI OF FASLI 1283.					
Names of Settlement Villages.	Names of Jamabandi Villages.	Portion merged.	Cultivated area of Government lands.	Assessment.	Remarks.
23. Manakadu ...	33. Manakadu	Part.	ACRES. 2,444	RS. 560	
24. Virapandiy-yan patta-nam.	34. Virapandiy-yan patta-nam.	All.	100	26	Fragments of villages interspersed in the fields of Virapandiy-yan patta-nam.
	Kayalpattanam	Part.	321	141	
	Talukarpulli ...	Do.	247	44	
	Teruchendur ...	Do.	14	2	
	Manakadu	Total ...	682	213	
25. Kila Teru-chendur...	35. Teruchendur ...	Part.	2,368	460	
26. Mela Teru-chendur...	Teruchendur ...	Part.	3,112	701	
27. Kayamoli ...	36. Kayamoli	All.	1,558	1,591	
28. Pallipattu ...	37. Pallipattu	Part.	851	3,387	

4. *Grouping of villages.*—The twenty-eight villages thus formed have been placed for settlement purposes in the second group for irrigation.

All these villages are irrigated directly or through tanks by the south main channel of Streeviguntum anicut, the last, or the eighth, on Tamrapurni river.

5. *Classification of soils.*—The soil is black loam, red loam, and red sand.

The following table exhibits the classification of the river-irrigated land :—

CLASSIFICATION.	Area in Acres.		
	Class.	Sort.	
	4	1	1,968
	4	2	1,494
	4	3	1,943
	4	4	934
	7	1	591
	7	2	755
	7	3	479
	7	4	331
	8	1	1,031
	8	2	146
	8	3	325
	8	5	2
			9,999

6. *Second crop.*—The second-crop charge has been consolidated on 8,544 of the 9,999 acres now settled. The assessment on the river-irrigated lands is as under :—

	Rate per Acre.	Area in Acres.	ASSESSMENT			Average Assessment per Acre.
			For a 1st crop.	For a 2nd crop.	Total.	
RS. A. P.						RS. A. P.
10 8 0		1,968	20,664	...	...	...
9 0 0		2,085	18,765	...	...	...
7 8 0		3,729	27,968	...	...	...
6 0 0		1,559	9,354	...	...	...
4 8 0		656	2,952	...	...	...
3 0 0		2	6	...	...	...
Total...		9,999	79,709	29,861	1,09,570	10 15 4

The average of five years' assessment of the river-irrigated lands is Rupees 73,776 ; by settlement, it is Rupees 1,09,570 ; the net increase by settlement, Rupees 35,794.

7. *Ooze springs from the sand-hills.*—There is a small tract irrigated by the ooze springs from the red sand-hills in the villages affected, or likely to be affected, by the Streevigungam anicut.

These have been assessed as under :—

CLASSIFI- CATION.	Rate per Acre.	Area in Acres.	ASSESSMENT.			Average Assessment per Acre.
			For a 1st crop.	For a 2nd crop.	Total.	
RS. A. P.						RS. A. P.
8 1	7 8 0	102	765	...	...	...
8 2	6 0 0	354	2,124	...	...	...
Total...		456	2,889	692	3,581	7 13 8

The average of five years' assessment of the lands irrigated by the ooze springs is Rupees 4,285 ; by settlement, it is Rupees 3,581 ; net decrease by settlement, Rupees 704.

8. *Lands supplied by baling.*—High level lands supplied by baling from channels, tanks, or rivers have been assessed at half the rate assigned to the block in which they are situated. The area thus rated is 771 acres assessed at Rupees 3,386.

9. *Garden lands.*—Four hundred and fourteen acres are supplied by lift from Government wells, and these have been assessed at 3½ and 2½ Rupees per acre according to the position and advantages of the lands thus supplied :—

CLASSIFI- CATION.	Area in Acres.	Assess- ment in Rupees.
Class.	Sort.	
2 2	317	1,109
2 3	97	241
Total...	414	1,350

10. *Ordinary dry lands.*—The lands consisting of the high level tracts on the sea-shore or higher up have been assessed in the lower tarams in consideration of the poverty of the soil, it being mostly sandy, generally fit only for the growth of palmyras and (odais), a kind of thorn-trees highly valuable for firewood ; but the lands intermixed with the irrigation are more valuable, and are being rendered much more so by the improvements in, and extension of, the river irrigation, and these have been assessed in the classes and sorts assigned to the blocks in which they are situated :—

Classification.		Taram.	Rate per Acre.	Area in Acres.	Assessment in Rupees.	Average Assessment per Acre.
Class.	Sort.		Rs. A.		Rs.	
4	1	3	■ 8	190	475	...
4	2	4	1 8	205	308	...
4	3	5	1 0	1,652	1,652	...
4	4	6	0 12	518	388	...
7	1	4	1 8	116	174	...
7	2	5	1 0	417	417	...
7	3	6	0 12	409	307	...
7	4	7	0 8	438	219	...
8	1	5	1 0	1,147	1,147	...
8	2	6	0 12	3,524	2,643	...
8	3	7	0 8	7,866	3,933	...
8	4	8	0 6	3,259	1,222	...
8	5	9	0 4	2,192	548	...
8	6	10	0 3	614	115	...
Total...		...	.....	22,547	13,548	0 9 7

The average of five years' assessment of the ordinary dry lands, excluding fixed remissions, is Rupees 5,406 ; by settlement, it is Rupees 13,548 ; net increase by settlement, Rupees 8,142.

11. *Palmyras.*—The charge on palmyras in the cultivated fields has, for a great part, been consolidated for a sum of Rupees 9,493. This is the charge for palmyras only, and is over and above the taram assessment of the fields that the palmyras stand on. The fixed charge on the trees in each field includes the growing seedlings and has raised the assessment on the trees in these fields by about Rupees 721 per annum. The total number of palmyra trees, the assessment of which has thus been consolidated, is 280,796, and that of the seedlings, also charged with the consolidated assessment, is 288,572, making a total of 569,368 palmyras free from the vexation of periodical inspection.

The number of palmyras, the assessment of which has not been consolidated, is 2,40,421, assessed at settlement at Rupees 6,796. These stand on lands belonging to other individuals than the owners of trees as well as on Government waste and poramboke.

The average of five years' palmyras assessment in this tract, both on trees the assessment of which has been consolidated and on those not consolidated, excluding fixed remissions, is Rupees 15,168 ; by settlement, it is Rupees 16,294 ; net increase Rupees 1,126.

12. *Pasturage.*—Noputta lands have been set aside as pasturage in these villages. The cattle find their pasturage in the ordinary dry lands and in the nunja fields when the harvest is over.

13. *Building site.*—About 39 acres, assessed at Rupees 36, have been added to the village building site where these were insufficient.

14. *Division of common lands.*—Lands held in common in twelve villages have been divided among 585 shareholders to the extent of 3,740 acres, and the sharing system in connection with these lands has entirely ceased.

15. Transfer of Puttas.—Nine hundred and twenty-five puttas have been transferred with the consent of the parties concerned.

Total average assessment of the last five years ...		Rs. 88,899
Deduct fixed remissions—		
Chaturbagam.....	184	
Dupati Maniem	179	
	363	
Remainder...		Rs. 88,536
Permanent loss by the transfer of cultivated lands to poramboke		
To Village building site	89	Rs. 86
,, Channels	117	406
,, Tanks	144	244
,, Roads.....	2	13
,, Burning-ground.....	9	8
,, Mandai or Cattle-stand	8	2
,, Threshing-ground	1	2
	815	706
By transfer of wet and garden dry, &c.....	1,272	575
	1,587	...
		1,281
Net average assessment of the last five years....		Rs. 87,255
Settlement Total...		1,31,435
Increase of land assessment		44,180
Increase of palmyra revenue.....		1,126
Total net increase...		45,306

Excluding, however, all new cultivation taken up in this Fasli from the calculation of the financial result, and drawing a comparison between the assessment of the old cultivation of Fasli 1283 at the settlement rates and the average assessment of the last five years, minus the fixed

The Settlement assessment.....	Rs. 1,31,435
Deduct new cultivation.....	15,759
Remainder...	1,15,676
Average net assessment of five years	Rs. 87,255
Difference...	28,421

revision of the revenue system, inasmuch as the revision would have resulted in a decrease of revenue to about Rs. 20,000 if made prior to the construction of the anicut. Then the grouping of the villages and the classification of the soil would have been low in due consideration of the deficiency of irrigation and poverty of the soil. This increase, as well as the increase brought on by the extension of wet cultivation and charging of proper rates of assessment on dry lands, must all, therefore, be attributed to the combined cause of the revision of assessment made with reference to the present improved state of irrigation in this tract of the taluk.

The principles on which the settlement has been made in these villages are precisely similar to those fully described in paragraphs 1 to 14 of the Collector's letter to the Board, dated 22nd August 1874, No. 416, as having been adopted in the taluqs of Tenkasi and Tinnevelly. The remarks made in paragraph 9 of that letter on the high average of assessment on the lands secured in the settlement in consideration of existing high rates, and the present improvement of irrigation with the separate charge for the palmyras in cultivated fields, and the new village service cess calculated at one anna per rupee of assessment, and on the consequent necessity of having to expect the maintenance of a high price of produce to enable the ryots to pay the assessment, are fully applicable to the settlement of those villages. Seventy-three per cent. of the irrigated area has been assessed at 10 Rupees and above, up to 15½ Rupees as shown below:—

15½ Rupees an acre on 19 per cent.		
13½ do.	20	do.
10 do.	34	do.

These rates have, however, been charged only on tracts best irrigated, while on those that are distant for irrigation or have new lands already brought and yet to be brought under irrigation, and where the soil is poor, being sandy or impregnated with soda and salt, more lenient rates have been adopted. The following table exhibits in one view the assessment of the whole area brought under settlement :—

IRRIGATED.				DRY.			
Rate.	Area in Acres.	Assessment in Rupees.	Average Rate per Acre.	Rate.	Area in Acres.	Assessment in Rupees.	Average Rate per Acre.
RS. A. 15 12	1,968	31,001	.....	RS. A. P. 3 8	317	1,109	.....
13 8	2,085	28,150	.....	2 8	287	716	.....
10 0	3,530	35,301	.....	1 8	321	482	.....
7 8	1,558	11,681	.....	1 0	3,216	3,216	.....
6 0	657	3,950	.....	0 12	4,451	3,338	.....
5 10	97	547	.....	0 ■	8,304	4,152	.....
4 ■	558	2,514	.....	0 6	3,259	1,222	.....
3 0	2	7	.....	0 4	2,192	548	.....
	10,455	1,13,151	10 13 ■	0 3	614	115	.....
Baling ...	771	3,386	4 6 3		22,961	14,898	0 10 4
	11,226	1,16,537					

17. AVAILABLE ASSETS.—There are 5,480 acres of dry and wet culturable waste in these villages which may soon be cultivated, and the assessment of this area would amount to Rs. 9,070, of which the wet assessment would be Rupees 7,275. Besides this, there is a large tract of dry land fit for irrigation to the extent of more than 5,000 acres in different villages, more especially in the eastern ones, Attur, Nallur, Kayalpattanam, Vadabagum, Manakadu, Pallipetta, Koyamoli, Mela Trichendur, and Kela Trichendur. Of these, about 3,400 acres may be soon brought to wet cultivation by careful management of water-supply to the existing tanks and channels at all times when water is available in the river and by adding one or two tanks between Tulukankulam and Avadiyarkulam tanks and improving the Attur Tannirpandal and Arumuganeri tanks. It will add to the revenue by Rupees 22,400; further improvement by an addition to the size of the south head sluice and to the width of the south main channel and construction of several more minor works needed, will not fail to secure a conversion of a further extent of 1,600 acres of dry lands to wet cultivation, which will fetch about 9,000 Rupees. It may be fairly expected that the second-crop cultivation, under an improved irrigation vigilantly kept up, will bring a sum of about 9,000 Rupees.

All these available assets realizable sooner or later will amount to Rupees 47,700 under the head of irrigated and Rupees 1,795 under the head of dry cultivation, making a total of Rupees 49,495. Now, the great swamp between Kulasagarapatnam and Trichendur has been successfully drained off by the new drainage channel excavated at a large outlay from the special funds. This will enable the extension of wet cultivation up to Kulasagarapatnam, where there is a large, hard-working population ready to avail itself of an opportunity of making wet cultivation in the neighbourhood. It appears almost feasible to have one or two tanks constructed between that town and the Ellappanaiken tank. At least one would be of great use near Sikachi. Here the soil, being on a low level, does not require the help of much water to secure a wet cultivation. If the tank be supplied during the high freshes, the rain would supply any deficiency. In this tract people already cultivate under Government or private wells raggy or valuable vegetables. Wet cultivation extended to this will add to the revenue about 4,000 or 5,000 Rupees. The seer charge to be made on inam lands found to measure more than ten per cent. in excess of the area shown in the inam registers, and the nirkuli (water-rate) to be levied on inam dry converted into wet, or the inam one crop land converted to two crop ones, may be added to the list of items representing the available assets of revenue in excess of the settlement now made.

A map showing the manner in which the villages under report were settled is herewith enclosed.

(True Copy.)

(Signed) R. K. PUCKLE,
Acting Director of Revenue Settlement,

ENCLOSURE No. 3.

*Statement showing the Jamabundi Beriz of the last five years for the twenty-eight villages under the South Main Channel of Sreeviguntum
Anicut, Yenkarai Taluk.*

WET.

AGAPUTTU OR RIVER-IRRIGATED.

Fazil.	Single Crop.	Occasional Double Crop.						Permanent Second Crop.						Total.					
		Assessment.			Extent.			Assessment.			Extent.			Assessment.			Extent.		
		1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.
1279...	...	2,439	15,850	850	5,214	2,736	7,950	3,274	25,194	22,297	47,491	6,572	46,258	25,033	71,291				
1280...	...	2,274	14,420	1,034	6,806	3,616	10,420	3,277	25,298	22,348	47,646	6,585	46,524	25,964	72,488				
1281...	...	2,192	14,069	1,205	7,530	4,174	11,704	3,290	25,292	22,445	47,737	6,687	46,891	26,619	73,510				
1282...	...	2,416	15,444	1,047	6,521	3,497	10,018	3,277	25,208	22,387	47,595	6,740	47,173	25,884	73,057				
1283...	...	1,268	8,014	2,275	14,438	8,405	22,843	3,282	25,250	22,428	47,678	6,825	47,702	30,833	78,535				
Total...		10,589	67,797	6,420	40,509	22,428	62,937	16,400	126,242	111,905	2,38,147	33,409	2,34,548	1,34,333	3,68,881				
Average...		2,118	13,559	1,284	8,102	4,486	12,588	3,280	25,248	22,381	47,629	6,682	46,909	26,867	73,776				

Statement showing the Jamabandi Beriz of the last five years, &c.—(Continued.)

Fazli.	WET—(Continued)						DRY.						TOTAL.		
	Ooze Spring-fed.			BALING.			GARDEN.			Assessment.			Extent.	Assessment.	
	Ex-tent.	Assessment.	Ex-tent.	Ex-tent.	Assessment.	Ex-tent.	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.			
Ex-tent.	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.	RS.	RS.	Total.	RS.	RS.	Total.	RS.	RS.	
16	17	18	19	20	21	22	23	24	25	25	26	27	28	29	
ACRES.	RS.	RS.	RS.	ACRES.	RS.	RS.	ACRES.	RS.	RS.	ACRES.	RS.	RS.	ACRES.	RS.	
1279	... ...	2,564	1,731	4,295	791	2,505	878	3,383	1,370	1,327	462	1,789	16,232	5,788
1280	... ...	2,629	1,636	4,265	798	2,522	846	3,368	1,348	1,312	504	1,816	16,237	5,890
1281	... ...	2,674	1,743	4,417	802	2,531	908	3,439	1,336	1,351	141	1,492	15,854	5,798
1282	... ...	2,533	1,694	4,227	801	2,513	903	3,416	1,340	1,359	202	1,561	15,847	5,728
1283	365	2,520	1,702	4,222	815	2,545	1,016	3,561	1,324	1,348	171	1,519	15,774	5,641
Total...	1,871	12,920	8,506	21,426	4,007	12,616	4,551	17,167	6,718	6,697	1,480	8,177	79,944	28,845	
Average...	374	2,584	1,701	4,285	801	2,523	910	3,433	1,344	1,340	296	1,636	15,989	5,769	
													25,190	88,899	

Statement showing the Jamabandi Beriz of the last five years, &c.—(Concluded.)

REMISSIONS.		TAX ON PALMYRAS.							
Fasli.	Fixed.	Occasional.			Remainder.		Amount of Tax on Palmyras.	Deduct Kudiwaram Remissions.	Net Amount.
Chaturbagum.	Dupatti Maniem.	Total.	Waste.	Withered Crops.	Total.	Total Remissions.			
32	33	34	35	36	37	38	39	40	41
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
1279	... ... ...	177	179	356	5,452	1,813	7,265	7,621	78,925
1280	... ... ...	175	179	354	4,355	1,664	6,019	6,373	81,454
1281	... ... ...	165	179	344	700	1,076	1,776	2,120	86,536
1282	... ... ...	176	178	354	17,233	138	17,371	17,725	70,264
1283	... ... ...	228	178	406	3,332	419	3,751	4,157	89,321
Total...		921	893	1,814	31,072	5,110	36,182	37,996	4,06,500
Average...	184	179	363	6,214	1,022	7,236	7,599	81,300	17,170

SNEHAGUNTA.
24th March 1876.

(Signed) T. VENCATA CHARRI,
Special Assistant to Collector.

(True Copy.)
(Signed) R. K. PUCKLE,
Acting Director of Revenue Settlement.

ENCLOSURE No. 4.

APPENDIX A.

Increase of Revenue by the South Main Channel of the Streeviguntum Anicut.

The assessment of the river-irrigated lands, including baling from rivers, channels, and tanks under the Streeviguntum anicut on the south side of the river, amounts, according to the settlement, to Rupees 1,10,239, which, compared with that of Fasli 1283, exhibits an increase of Rupees 31,556. But the latter assessment again shows an increase of Rupees 7,050 compared with that of Fasli 1279, the year preceding that in which the south head sluice began to extend its benefits to many of the villages depending on the Streeviguntum anicut on the south.

Adding this item, therefore, to the above increase, the total gain by the anicut now realized comes to Rupees 38,606. This resolves itself into three items as follows :—

	RS.
Increase on the previously existing irrigated lands	18,560
Conversion of dry into wet	7,107
Waste brought under irrigation	12,939
 Total ...	 38,606

2. In the Collector's letter to the Board, dated 31st May 1872, No. 224, the expected increase from the anicut was given at Rupees 1,01,011, namely, Rupees 22,527 from the irrigated lands already under cultivation, and Rupees 78,474 from dry lands to be converted into wet and from waste lands to be brought under cultivation. But in the Jamabandi amount then calculated the assessment of certain minor villages, such as Koluvanallur and Kumarapannai and that of the lands irrigated by baling, were slipped. These amount approximately to Rupees 4,000. Adding this to the Jamabandi assessment then taken in comparison, the expected increase on the cultivated wet lands would be only Rupees 18,527. This amount has already been realized as would be seen from the figures above inserted. Out of the sum of Rupees 78,474 expected from the conversion of dry to wet and cultivation of waste, Rupees 20,046 have already been realized ; Rupees 29,675, or in round figures Rupees 30,000, will be soon realized. A further sum of Rupees 23,000 may be fairly expected on further improvements in the head sluice and channels and construction of a few more tanks as explained in the latter part of the report on the settlement. Thus it will be seen that the total sum of increase already realized and yet to be realized, sooner or later, would come to Rupees 98,281. The expectation of these increases cannot prove a failure provided water be supplied to at least three-fourths of the extent calculated by Mr. Shephard to be irrigated by the anicut for two crops.

3. It has, however, to be remarked that the tract of country yet to be brought under wet cultivation consists of much sandy soil, which soaks a good quantity of water at every intermitting flow especially in the dry season, and the high westerly wind to which this tract is subject, and which brings a good deal of blown sand, evaporates away a large quantity of water. The banks of tanks and channels also are mostly sandy or consist of very soft sandy loam impregnated with soda, which soon melts away by the high winds, and costs a good deal to the upkeep of the works. Due consideration must, therefore, be given to all these circumstances in calculating the further increase of revenue by the anicut. With all these, however, a very large portion of the increase may be gradually realized by further improvements expected to be added piecemeal. The soil will become more consolidated by the continual flow of water upon it and in the neighbourhood, and become more prepared to admit of wet cultivation requiring less water than in the first instance.

4. The total cost of the anicut and the works on both sides of the river is estimated to be Rupees 10,00,000. Of this amount, the portion appertaining to the southern side, consisting of half the cost of the anicut and charge on superintendence, and the total cost of the head sluice, tanks, channels, and other project works on that side would amount to Rupees 4,00,000.

The total increase already secured, Rupees 38,606, is 9½ per cent. on this expenditure. A further increase of Rupees 30,000, which was shown to be soon available, and the consequent exten-

sion of cultivation which must take place within a very few succeeding years, will add to the percentage by $7\frac{1}{2}$ and make the total percentage 17 per cent. The ultimate further improvement of the irrigation will, it is expected, bring in a further addition of five per cent. more, making the whole available possible increase 22 per cent. Allowing, however, a further outlay of money for securing further improvements in the irrigation required, a liberal amount of Rupees 1,00,000, and making the total cost on the southern side Rupees 5,00,000, the percentage of total realizable increase on this enhanced amount will be 18 per cent. It will be observed that $7\frac{1}{2}$ per cent. of this increased amount has already been realized, and $4\frac{1}{2}$ at least will very soon be realized, leaving the remaining six per cent for further addition. But it must be repeated here that the actual increase of percentage on the actual expenditure apportionable to the south side is $9\frac{1}{2}$ per cent as shown above.

5. It must be also remarked here that, in addition to the increase under the head of irrigation

	RS.
Dry assessment of Fasli 1279, including garden	7,577
Deduct fixed remissions	386
	<hr/>
Assessment as per settlement	7,221
	<hr/>
Difference... +	14,898
	<hr/>
	7,677

already realized, there is an increase of Rupees 7,677 on dry lands in this tract, of which more than three-fourths must be attributable to the improvement of irrigation by the anicut inasmuch as enhanced rates of assessment were imposed on those lands in due consideration of the advantages they derive by the improved

irrigation in various ways, such as increase in the springs, in the wells, soakage in the substratum affording better yield to the dry crop and palmyras, and the greater convenience secured to the cultivators. As already described in the report, the improvement of irrigation has enabled better classification of the soil and assigning of a better group to the villages, which not only secured the actual increase above set forth, but also saved a loss of more than 20,000 Rupees from the existing revenue, which loss must have inevitably occurred if the settlement had taken place prior to the construction of the anicut. By the help of the anicut improvement, a high average of the irrigated assessment, Rupees 10-15-4 per acre, has been secured, which is a little higher than that of Rupees 10-14-9 gained in the Tinnevelly Taluk on the Tamrapurni irrigation under the upper ancuts. In all ordinary seasons the necessity for remission for waste and withered crop must naturally cease to occur. This circumstance must also be taken into consideration in connection with the benefits of the improvement. Although all these different extra points cannot be brought into the calculation of the percentage of the actual increase of revenue, yet they have all had much to do with securing that actual increase, and must be attributed to the benefits derived by the improved condition of irrigation secured by the anicut.

(True Copy)

(Signed) R. K. PUCKLE,
Acting Director of Revenue Settlement.

ENCLOSURE No. 5.—Map.

In this report the Acting Director of Revenue Settlement gives the financial results of the settlement recently made in the tract on the southern bank of the River Tamrapurni in the Tinnevelly District irrigated from the Streeviguntum Anicut.

2. This tract is fifty-five square miles in extent, and comprised thirty-seven old villages, which, by apparently judicious and necessary clubbing, have now been reduced to twenty-eight. The details of the settlement are fully given in the report of the Director and of the Special Assistant to the Collector in the Settlement Department, but it is unnecessary that the Board should examine them with minuteness, as the settlement has been conducted in the same manner and on the same principles as have been approved by Government for other portions of the

river-valley (G. O., 5th March 1875, No. 360). The villages have been classified in blocks, and the rates imposed thereon with reference to soil, situation, irrigation, &c.; the assessment of the dry lands intermixed with the new irrigation has been raised in consideration of the advantage accruing from the moisture around them; lands supplied by baling (771 acres) are charged at half the rates assigned to lands irrigated by direct flow; lands (456 acres) under the springs fed from the sand-hills are treated with consideration and the assessment considerably lightened; second crop has been compounded for on 9,000 out of the 10,455 acres of wet land dealt with; and as usual in Tinnevelly the common lands have been divided, the palmyra tax has been compounded for to a large extent, building sites have been assigned when necessary, and numerous puttus have been charged. The average rates on wet land are Rupees 7-15-6 for first crop, and Rupees 10-13-2 including second crop compounded for, and Annas 10-4 on dry land.

3. In now submitting these results, Mr. Puckle's object is to show the return which may be expected from the Streeviguntum Anicut works. He states that but for the anicut the settlement of this tract, naturally infertile, and formerly poorly supplied with irrigation, must have resulted in a considerable reduction of the demand, which reduction is estimated at Rupees 20,000 out of a revenue of Rupees 86,546 in Fasli 1279, the year before the benefit of the Streeviguntum Channel was first felt. The construction of the anicut, however, has enabled him to raise the grouping of the villages and to fix the revised demand at Rupees 1,31,435 on lands occupied in Fasli 1284. In these circumstances, he is fully entitled to place the whole of the increase by settlement to the credit of the project. Comparing Fasli 1283 with Fasli 1284, he shows that the increase was Rupees 38,363 to which is to be added Rupees 7,422, being increase already brought to account up to Fasli 1283 and since the excavation of the channel, total Rupees 45,785, or 9·2 per cent. on an outlay of five lakhs, which he takes as half the cost of the project to be apportioned to the southern section. It is anticipated that, as population increases and irrigation extended to the entire area commanded, there will be an ultimate further increase of revenue of Rupees 49,495, which will raise the return to Rupees 95,280, or 19·1 per cent.

4. Mr. Puckle further states that the returns from the other portion of the project on the northern bank of the river will be equally good.

5. In these calculations Mr. Puckle takes the whole demand on all classes of lands which have come under settlement, and does not refer to the remissions

River Irrigation.	Rs.
Demand, Fasli 1269...	71,291
„ „ 1284... „ „	<u>1,09,570</u>
Difference... „ „	38,279
Add remission saved „ „	<u>7,236</u>
„ „	45,515
Add net increase on other items by settlement „ „ „ „	<u>7,006</u>
„ „	52,521

for waste and withered crops which have averaged, in the five years ending Fasli 1283, Rupees 7,236, and which will be saved hereafter. If this item be included and the river-irrigated area alone be compared, the return is Rs. 45,515, or nine per cent. on five lakhs as before; and if the further increase on other items, possible only owing to the anicut, be added, the return already realized becomes 10·5 per cent.

6. It would appear, however, from the details of the estimate for the project given in G. O., 8th January 1874, No. 1,398, Public Works Department, that the southern section will not be debitale with more than from $3\frac{3}{4}$ to 4 lakhs out of the total of Rupees 10,40,480 ; and, if this is the case, the return realized on this portion will be raised to at least 13 per cent.

7. These results are eminently satisfactory. The area under discussion has been very exceptionally treated. The officers of all departments concerned—Revenue, Public Works, and Settlement—and the ryots have all worked together to render the project a success, and the result proves how much may be done towards the development of a popular scheme without charge to Government. A lakh of Rupees has been raised by the people themselves, and has been expended in works of storage, distribution, and drainage, and other works not provided for in the estimates. The details have been reported to Government in Board's

G. O., dated 25th February 1875, No. 302. Proceedings, dated 4th January 1875, No. 4, and the work has received their approbation. The Director now shows how largely these works have been instrumental in bringing in an immediate return upon the Government outlay on the anicut project, and records his obligations to the Special Assistant to the Collector Venkatachariar in conducting the settlement to a successful issue.

8. The Board cannot forgo, on the ground that Mr. Puckle is now a member of their body, the pleasure of recording their appreciation of the large share in the good work which he took when Collector of the district. It is only one of many such works, but it is perhaps the one which will be longest remembered.

(True Copies and Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

To the Officiating Secretary to Government, Revenue Department, with map.

Copy to the Director of Revenue Settlement.
,, to the Collector of Tinnevelly.

Exd. J. W. Fischer.

1875.

Board of Revenue,
MADRAS.

PROCEEDINGS, 10th MAY 1875, No. 1,217.

Encl.



Received

MAY.
No. 1,217.

Settlement—recently made in the tract on
the Southern bank of the Tambapurni River
in Tirunelveli District, irrigated from the Street-
viguntum Anicut.—Report of Director of Re-
venue Settlement on the financial results of—
reviewed and submitted to Government with
remarks.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 1st September 1875.

Read again Board's Proceedings, dated 12th July 1875, Miscellaneous No. 6,257.

Read also the following letter from R. K. PUCKLE, Esq., Acting Third Member of the Board of Revenue, in charge of the Settlement Department, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Madras, 14th July 1875, No. 1,432-39 :—

I HAVE the honor to forward the Acting Additional Sub-Collector's report on the settlement of the northern portion of the Ambasamudram Taluq received through the Collector of Tinnevelly.

2. The tract reported on, comprising forty-six villages with an area of 114 square miles, includes that portion of the taluq which is irrigated by minor rivers, all affluents of the Tambrapurni, and, though not so rich as the tract on the southern side of the river, is still above the average.

3. The material improvements effected by Mr. Arundel during the settlement are clearly set forth in the enclosure to his report, and a glance at the map will show the localities in which they were effected. Knowing the ground so well and the inaccessible nature of the country now opened up by roads, I can fully appreciate the benefits conferred, and feel sure that the ryots will have cause to remember this settlement, were it only by these roads, and the disposal of the hitherto interminable Ramanadi irrigation dispute.

4. Mr. Arundel has worked out an average of Rupees 10-5-0 an acre for the river-irrigated lands, or rather less than the average arrived at further down the river, where the irrigation is certainly better.

5. Almost the entire area has been compounded as permanent double crop.

6. The rain-fed tanks have been leniently treated and their average assessment, Rupees 4-2-1 an acre, corresponds with the assessment imposed on the lands under similar tanks elsewhere in the uplands skirting the valley.

7. The dry lands are poor, and have been assessed at an average of Annas 5-9 an acre.

8. The palmyras have been dealt with as usual in Tinnevelly.

9. The samudayam, or common lands, aggregating 8,166 acres, have been divided in every village.

10. Mr. Arundel mentions that no lands have been assigned as pasturage, but it was my intention to have allotted free-grazing grounds to each village at the hill foot, and preliminary arrangements were made when I was in the taluq last year. Advantage should be taken of the present healthy season to mark out the hill-side grazing grounds for registry before this settlement of the taluq is completed.

11. Deducting permanent remissions and comparing the net demand for last year with the revised assessment, there is an increase of Rupees 7,010 by settlement.

12. I had hoped that the entire taluq of Ambasamudram would have been finished during the fasli, but Mr. Arundel's absence on leave and other circum-

stances occurred to hinder the work ; it is, however, far advanced, and will be shortly completed. It is a very important and difficult taluq to settle, and Mr. Arundel has taken great pains with the work.

ENCLOSURE No. 1.

From W. H. COMYN, Esq., Acting Collector of Tinnevelly, to R. K. PUCKLE, Esq., Acting Third Member of the Board of Revenue, in charge of the Settlement Department, dated Pudukudi, 2nd July 1875, No. 601.

I HAVE the honor to submit copy of the Additional Sub-Collector's report* on the settlement of the northern portion of the Ambasamudram Taluq, the conduct and results of which appear to me to be eminently satisfactory.

2. In the financial result the assessment of this tract as per settlement remains about the same as the gross land assessment of Fasli 1283 ; but, deducting certain fixed remissions which have been discontinued, the increase by settlement is Rupees 7,010.

3. Compounding for second crop has been largely resorted to, the second-crop charge having been consolidated on almost the entire irrigated area, while about 5,000 acres out of the total of 13,000 acres of river-irrigated land have been newly brought from single to permanent double crop land. The water-supply being abundant, I share Mr. Arundel's hopes that the ryots will take advantage of the favorable rates secured by compounding for a second crop to raise two crops on a large area, which has hitherto yielded only one.

4. The necessary information regarding the alterations in village boundaries was furnished in Mr. Arundel's letter, No. 93, dated 4th June 1875, forwarded to you with my letter, No. 533, dated 9th June 1875.

5. I take this opportunity also of submitting copy of Mr. Arundel's report, No. 111, dated 21st June 1875, on the works of improvement undertaken in connection with the settlement of this tract.

6. From this report you will see that upwards of Rupees 20,000 have been spent on works of the greatest public utility the chief of which is a new anicut at the head of the Ramanadi river ; over thirty miles of village roads, with the requisite masonry works, have been constructed in localities where communications were much needed ; irrigation works have been benefited by the addition of upwards of seventy new masonry sluices and have been otherwise improved, while the interests of sanitation have not been overlooked, improvements having been effected in several village sites.

7. Of the total amount realized and expended as above, viz., Rupees 20,960, more than one-half was contributed in money and labor by the villagers, over Rupees 6,000 were realized by the sale of the right of occupancy of waste lands and by the sale of trees, while the resources of the Local Fund Board, Shermadevi Circle, have only been taxed by the allotment of the comparatively small sum of Rupees 3,718 ; to make up the total sum expended on works which cannot fail to confer on the inhabitants of a considerable portion of that Circle great and permanent advantages.

8. The result is most satisfactory, and too much praise cannot be bestowed on Mr. Arundel for the care with which he planned, and the energy with which he carried out, these works of improvement. Mr. Arundel also bears testimony to the zeal and energy shown by Narayanasami Mudali, Tahsildar of Ambasamudram, and by Krishnasamy Iyengar, the Head Classifier, both of whom afforded him valuable assistance in pushing on the work in the face of considerable difficulties.

9. I beg to forward two maps—one showing the manner in which the villages of the tract under report have been laid out for settlement and the other showing the locality of the chief works of improvement.

ENCLOSURE 1 in No. 1.

From A. T. ARUNDEL, Esq., Officiating Additional Sub-Collector, to W. H. COMYN, Esq., Acting Collector of Tinnevelly, dated Ambasamudram, 19th June 1875, No. 110.

I HAVE the honor to report on the settlement of the northern half of the Ambasamudram Taluk including all the villages north of the Tamrapurni, together with the village of Aladiyur lying between the Tamrapurni and the Manimuttamadi.

2. The whole taluk formerly contained ninety-eight villages, of which forty-one lay north of the river. These have now been formed by settlement into forty-five, which, together with the village of Aladiyur, formed the subject of the present report.

3. The particulars of the alterations in village boundaries have been fully detailed in my letter, No. 93, dated 4th June 1875, and need not be repeated here.

4. The river-irrigated tract is of a very intricate character, as the different streams and channels often merge one into another, and a single village frequently receives its water supply from two or more sources. The tract, may however, be conveniently divided into—

- (1). The tract under the first and second anicuts over the Tamrapurni, and
- (2). The tract irrigated by the Gatinanadi and its tributaries, the Ilupaiar, the Ramanadi, and the Jembunadi.

5. The following table shows the source of irrigation of each village and also the group in which each village has been placed. From this it will be seen that the five villages under the first anicut over the Tamrapurni, which are well irrigated but isolated in position, are placed in the third group. The three villages under the second anicut over the Tamrapurni are most advantageously placed both for irrigation and locality, and are in the first group. Four villages supplied by the Gatinanadi and its tributaries, lying at the foot of the hills and isolated in position, together with two villages at the extreme eastern end of the irrigation, poorly supplied with water, are placed in the third group. The remaining villages are in the second group. The dry villages north of the river-valley are all placed in the third group.

No.	Name.	Group.	Source of Irrigation.
1	Aladiyur		
2	Vikramasingapuram		
3	Isaniamatam ...	Third.	First anicut over Tamrapurni.
4	Ekambarampuram		
5	Adayakarungulam		
6	Mela Ambasamudram		
7	Kila Ambasamudram	First.	Second anicut over Tamrapurni.
8	Sattapattu	Third.	
9	Sivaseilam	Third.	First anicut over Gatinanadi.
10	Mela Ambur	Second.	Third and fourth anicuts over Gatinanadi.
11	Kila Ambur	"	
12	Tiruvalisiwaram	"	Do. and fifth anicut.
13	Mannarkovil	"	Fifth anicut over Gatinanadi and first over Tamrapurni.
14	Bramadesam	"	Do. do. and second anicut over Tamrapurni.
15	Darmapuramatam	Third.	Ilupiar.
16	Govindaperi	"	Ilupiar and Ramanadi.
17	Mela Kadayam	"	Ramanadi.
18	Kadayam Perumpattu	"	Jembunadi.
19	Kila Kadayam	Second.	Ramanadi.
20	Terku Kadayam	"	Ramanadi and Jembunadi.
21	Ravanasamudram	"	Ramanadi.
22	Virasamudram	"	Do.
23	Alwarkurichi	"	Ramanadi and second anicut over Gatinanadi.
24	Pappankulam	"	Ramanadi.

No.	Name.	Group.	Source of Irrigation.
25	Tuppakudi	Second.	Ramanadi.
26	Adachani		Do.
27	Pallakkal	"	Sixth anicut over Gatinanadi.
28	Palanjadi	"	Do.
29	Rengasamudram	"	Do.
30	Iluppakurichi	"	Do.
31	Kapaliparei	"	Do.
32	Pappakudi	"	Do.
33	Vadaku ariyanayagipuram	"	Do.
34	Arasankulam	Third.	Do.
35	Vengadampatti	"	Do.
36	Madattur		
37	Terku Madattur		
38	Anjankattalei		
39	Pudapatti		
40	Edaikal		
41	Senkulam	"	Dry.
42	Kasidarmam		
43	Marudampudur		
44	Odeimarichan		
45	Odeyampuli		
46	Mukkudal		

7. *Classifications of soils.*—The following table show the classification of soils under (1) the Tambrapurni and (2) the Gatinanadi and its tributaries. The whole of the river irrigated area comprises 13,091 acres:—

TAMBRAPURNI.			GATINANADI, &c.		
Classification.		Area.	Classification.		Area.
Class.	Sort.		Class.	Sort.	
4	1	99	4	1	1,374
4	2	264	4	2	895
4	3	551	4	3	941
4	4	230	4	4	634
7	1	482	4	5	421
7	2	534	7	1	1,634
7	3	469	7	2	1,648
7	4	50	7	3	2,626
Total...		2,679	Total...		10,412

8. *Assessment.*—The assessment of the river-irrigated lands is as under:—

	RATE PER ACRE.		Area.	ASSESSMENT.			Average Assessment per Acre.
	For 1st Crop.	For 2nd Crop.		1st Crop.	2nd Crop.	Total.	
Tamrapurni.	RS. A. P. 12 0 0	RS. A. P. 8 0 0	ACRES. 62	RS. 741	RS. 494	RS. 1,235	RS. A. P. 10 11 5
	10 8 0	7 0 0	264	2,766	1,846	4,612	
	9 0 0	4 8 0	695	6,254	3,126	9,380	
	7 8 0	2 8 0	748	5,609	1,869	7,478	
	6 0 0	1 8 0	472	2,835	708	3,543	
	4 8 0	1 2 0	433	1,948	488	2,436	
	3 8 0	0 14 0	5	18	5	23	
	Total...		2,679	20,171	8,536	28,707	
	10 8 0	7 0 0	1,192	12,520	8,343	20,863	
	9 0 0	4 8 0	2,417	21,751	10,850	32,601	
Gatinanadi.	7 0 0	2 8 0	2,481	18,608	6,194	24,802	RS. A. P. 10 3 4
	6 0 0	1 8 0	2,371	14,228	3,558	17,786	
	6 0 0	... ... ...	9	56	...	56
	4 8 0	1 2 0	1,352	6,084	1,524	7,608	
	4 8 0	... ... ...	81	364	...	364
	3 8 0	0 14 0	487	1,705	427	2,132	
	3 0 0	0 12 0	22	65	16	81	
	Total...		10,412	75,381	30,912	1,06,293	
	Grand Total...		13,091	95,552	39,448	1,35,000	10 5 0

The assessment on the same area in Fasli 1283, without deducting remissions of any kind, was Rupees 1,31,076. By settlement it is Rupees 1,35,000; net increase by settlement Rupees 3,924.

9. *Second Crop.*—The second-crop charge has been consolidated on 13,091 out of 13,091 acres now assessed, on the understanding that there will be no remission of the second-crop charge hereafter. The result of the low charge for second crop when thus consolidated has been that 4,917 acres have newly been brought from single to permanent double-crop land. The extent cultivated with second crop under the Tamrapurni in Fasli 1283 was 1,991 acres, yielding a second-crop assessment of Rupees 11,025, and under the Gatinanadi 6,093 acres, yielding a second-crop assessment of Rupees 34,145. In all 8,084 acres were cultivated with a second crop which yielded an assessment of Rupees 45,171. Through these favorable rates now imposed the ryots have every inducement to grow a second crop whenever it is practicable; and, as the water-supply is everywhere abundant, two crops will probably be raised constantly over the whole area charged with the consolidated rate.

10. *Rain-fed Tanks.*—There are 149 rain-fed tanks in the portion of the taluk now under report, and they have been assessed as follows:—

	CLASSIFICATION.		Area.
	Class.	Sort.	
	4	5	150
	7	2	10
	7	3	289
	7	4	1,119
	7	5	332
	8	5	644
	Total...		2,544

The second-crop charge has been consolidated on 1,880 out of 2,544 acres. The assessment of the rain-fed tanks is as follows :—

RATE PER ACRE.		Area.	ASSESSMENT.			Average Assessment per Acre.
For 1st Crop.	For 2nd Crop.		1st Crop.	2nd Crop.	Total.	
RS. A. P.	RS. A. P.	ACRES.	RS.	RS.	RS.	RS. A. P.
6 0 0	... ... ...	10	59	...	59	
4 8 0	1 2 0	211	948	237	1,185	
4 8 0	... ... ...	170	767	...	767	
3 8 0	0 14 0	1,239	4,270	1,084	5,354	
2 8 0	... ... ...	196	685	...	685	
3 0 0	0 12 0	400	1,201	300	1,501	
3 0 0	... ... ...	281	844	...	844	
2 8 0	0 10 0	30	76	19	95	
2 8 0	... ... ...	7	18	...	18	
Total ...	2,544	8,868	1,640	10,508		4 2 1
Made over on permanent lump assessment	165	...	...	457		2 12 4
Grand Total ...	2,709	8,868	1,640	10,965		4 0 0

11. The second crop has been compounded for at a quarter of the first-crop assessment under 103 of these tanks, on the understanding that there will be no remission for failure of second crop hereafter.

Besides these, eleven rain-fed tanks have been made over to the holders on a permanent lump assessment of Rupees 457 on condition that there will be no remission and that repairs will be executed by the holders. All these are small poor tanks on which it is unlikely that repairs would ever be executed by Government, and the holders will now have every inducement to keep them in repair and supplement the natural water-supply by the construction of wells, &c.

The assessment of the rain-fed tanks for Fasli 1283 without deducting remissions for waste and withered crop was Rupees 13,069. By settlement it is Rupees 10,965; net decrease by settlement Rupees 2,104.

12. *Lands supplied by baling.*—High-level lands supplied by baling from channels, tanks or rivers have been assessed at half the rate assigned to the block in which they are situated. The area thus irrigated is 225 acres, assessed at Rupees 998. The assessment of Fasli 1283 was Rupees 781.

13. *Garden lands.*—Two hundred and ninety-five acres, assessed at Rupees 800, are supplied by lift from Government wells. Of these, 53 acres have been assessed at Rupees 3½ per acre, and 242 acres at Rupees 2½ per acre. The assessment in Fasli 1283 was Rupees 394.

14. *Ordinary dry lands.*—The uplands have chiefly been assessed in the lower tarams, but the lands interspersed with the irrigation have been assessed in the class and sort assigned to the block in which they are situated. Considerable reductions had to be made in some of the dry villages to get rid of anomalous rates. In two villages 9,156 acres of poor gravelly and sandy soil were previously assessed at Annas 11-3 an acre, although the soil was in no way superior to lands assessed at less than half that rate elsewhere. These lands have now been assessed at Annas 8 per acre.

15. The following table exhibits the classification of dry lands :—

CLASSIFICATION.		Taram.	Rate per Acre.	Area.	Assessment.	Average Assessment per Acre.
Class.	Sort.					RS. A. P.
4	1	8	2 8 0	18	31	
4	2	4	1 8 0	18	27	
4	3	5	1 0 0	■	9	
4	4	6	0 12 0	101	76	
4	5	7	0 8 0	28	14	
7	1	4	1 8 0	443	668	
7	2	5	1 0 ■	616	616	
7	3	6	0 12 ■	1,373	1,031	
7	4	7	0 8 0	10,033	5,022	
7	5	8	0 6 0	3,305	1,245	
8	4	8	0 0 0	11,945	4,483	
8	5	9	0 4 0	29,410	7,370	
		Total...		57,294	20,592	0 5 9

The assessment on these lands in Fasli 1283 was Rupees 22,745. By settlement it is Rupees 20,592 ; net decrease by settlement Rupees 2,153.

16. *Palmyras.*—The charge on palmyras in the cultivated fields has for the most part been

There is thus an increase by settlement of Rupees 7,010, arising almost entirely from the resumption of the fixed remissions above noted.

23. The accompanying map shows the manner in which the villages have been laid out for settlement.

24. In the course of the settlement, I have found that a very large quantity of valuable land in Government villages has been for a long time held free of all tax as zemin by the Zemindar of Urkad, although no mention of it is made in his Istimrar Sanad. This will form the subject of a separate report.

25. A number of useful public works undertaken in connection with the settlement chiefly from village subscriptions are in course of construction, and a separate report will be submitted about them also.

(True Copy.)

(Signed) W. H. COMYN,
Acting Collector.

ENCLOSURE No. 3.

From A. T. ARUNDEL, Esq., Officiating Additional Sub-Collector, to W. H. COMYN, Esq.,
Acting Collector of Tinnevelly, dated 21st June 1875, No. 111.

As promised in paragraph 25 of my report on the settlement of the northern portion of the Ambasamudram Taluq, I have the honor to submit an account of the chief works of public improvement constructed during the introduction of the settlement.

2. The work of greatest importance is a new anicut at the head of the Ramanadi river, which, together with some minor works and alterations, is designed to put a stop to long-standing disputes between the villages of Kodayan, Govindaperi, Ravaناسامورام, Virasamudram, and Alwar-kurichi. The whole tract is intersected by an intricate net-work of tanks and channels comprising six masonry anicuts and dams and twenty tanks irrigating an extent of 2,284 acres. The disputes regarding the distribution of the water-supply were so strong that the opposing parties employed separate watchmen to sit day and night throughout the whole cultivation season at the head of certain channels to see that things were kept in *statu quo*.

3. After the whole tract had been carefully inspected for settlement purposes, representatives of the five villages were called together, and, after some discussion, they unanimously agreed to subscribe whatever might be necessary to build masonry works that would distribute the water in exact proportion to the extent irrigated under each work. A small deposit as surety was made on account of each village which was expended in making a rough road to reach the spot at the foot of the hills where the chief work was to be erected.

4. The Assistant Engineer, Mr. Grant, subsequently accompanied me over the place and drew up estimates, amounting to Rupees 3,250, for the chief works. The villagers were then called on for their subscriptions, and, with the exception of one village, Ravaناسامورام, which held back, soon paid into the treasury Rupees 2,000, of which nearly Rupees 1,700 were brought to me in person by the village officers.

5. One of the works estimated at Rupees 1,700, which consisted in the alteration of an existing Government anicut and the construction of a dam, was undertaken by the District Engineer out of Imperial Funds, and is nearly completed.

6. The new anicut at the head of the Ramanadi was commenced, as soon as the dry season set in, by head classifier Krishnasami Iyengar, whose industry and skill have already been favorably noticed in G. O., No. 302, dated 25th February 1875. Unfortunately the place turned out to be very feverish, and it was with great difficulty that workmen could be induced to stay. In April before the foundations had been completely got in, Krishnasami Iyengar himself fell ill, and has not since been able to attend office. The Tahsildar Narayanasami Mudali then took up his head-

quarters in the neighbourhood and remained there till the completion of the work, collecting workmen, materials, and supplies, and it is due to his perseverance and energy that the work has been brought to a successful conclusion ; notwithstanding the precautions taken in bringing the workmen away at night and in distributing quinine and food between thirty and forty stone masons fell ill of fever, and many other works elsewhere were brought to a stand-still for want of these useful artisans.

7. The villagers of Aladiyur have carried out some important improvements. This village though splendidly irrigated is but rarely visited, as it is cut off on the north and west by the mountains and on the east and south by the Tambrapurani and its chief affluent the Manimurtanadi. The only way from the village to the Nunjah was along a rocky path near the river where a horse could go only with difficulty. The irrigation channel which takes off from the first anicut over the Tambrapurani and irrigates 650 acres was supplied with hardly any sluices except hollowed palmyra trunks of which there were over 100. A road four miles in length from the village to the Nunjah and along the channel bank including a new sand-scour sluice and a bridge, the whole estimated to cost Rupees 2,400, is now nearly completed out of special village funds. In addition to this, all the hollowed palmyra trunks have been removed and forty-six sluices of substantial masonry costing over Rupees 1,300 have been built by the ryots concerned at their own expense.

8. In the village of Vikramasingapuram, north of the Tambrapurani, a road two miles in length is in course of construction along the bank of the Irrigation channel which is supplied (like Aladiyur on the opposite bank) from the first anicut over the Tambrapurani. Here also twenty-six masonry sluices, costing about Rupees 470, have been built by the ryots concerned in substitution of hollowed palmyra trunks.

9. In Ambur a road is under construction five miles in length, estimated to cost Rupees 1,400, running westward to the isolated villages of Kalianipuram and Sivasailam.

10. From Alwarkurichi westward to Darmapuramatam a new road has been made three-and-a-half miles long.

11. In Darmapuramatam a single enterprising ryot, Subramania Mudali, has cut a new supply channel a mile in length to his rain-fed tank, making at the same time a road with four large culverts along the channel bank. This work cost Rupees 1,400, of which Rupees 1,000 were subscribed by the ryot in question. It had been mooted from time to time for about fifteen years, but local jealousy had proved an insurmountable obstacle. In illustration of the eagerness with which this work was desired, I may mention that within an hour or two of my sanctioning the scheme with the consent of the hitherto hostile faction, the ryot appeared at my tent with a bag of Rupees 700 as a first instalment begging that the work might be begun at once. He himself took up the work as contractor, receiving back his own money in payment, and he employed carts to convey water a long distance in order to soften the ground where the channel was to be excavated.

12. The road abovementioned has been continued northward to Govindaperi and thence eastward to Ravanasmudram at a cost of Rupees 1,700, and a complete circuit is thus made through a richly irrigated valley where no road was in existence before. The rice grown over a considerable area is now reckoned to be worth from 4 to 6 Annas a Cottah more than before the road was made (a Cottah = 96 Madras measures worth about Rupees 6).

13. Three roads with a total length of seven-and-a-half miles and estimated to cost Rupees 5,700 are under construction, opening up the important villages of Adachani, Pallakal Pananjadi, and Rangasmudram which jointly yield an annual revenue to Government of Rupees 20,000.

14. The following statement shows the estimated cost of the principal works and the sources from which funds have been raised. From this, it will be seen that out of a realized total of Rupees 20,960, Rupees 6,313 were realized by sale of the right of occupancy of waste lands and by sale of trees, Rupees 10,937 have been given in subscriptions of money and labor, and Rupees 3,718 have been allotted by the Local Fund Board. These funds have been devoted

to constructing over thirty miles of village-roads with a number of bridges and culverts, an anicut over the Ramanadi with a new channel and sundry other works, above seventy masonry irrigation sluices, and sundry improvements to tanks, bridges, and village sites. I should add that other works to a very great number have been begged for by the ryots who are ready to buy up the waste lands in their own villages and to subscribe money and labor if the works which they see are for their own benefit can but be carried out. A few of these I hope to be able to undertake, but many must fall through for want not only of a sufficiency of skilled subordinates but of time and opportunity to investigate details and to allow the ryots the full discussion which is with them an essential preliminary to all action.

15. Statement of works executed during settlement in the northern portion of the Ambasamudram Taluk :—

	Length in miles.	Estimate of chief works.	Local Fund allotment, 1874-75.	Sale of land or trees.	Subscription.	Remarks.
1. Anicut across the Ramanadi, &c ...	...	Rs. 1,550	Rs. ..	Rs. ...	Rs. 2,500	Anicut finished; sundry works in progress.
2. Village road, bridge, sand scour and 4½ sluices in Aladiyur.	4	2,440	100	784	1,984	In progress.
3. Do. and 26 sluices in Vikramasingapuram.	2	1,262	100	...	1,333	Do.
4. Do. Alwarkurichi to Darmapuramata.	3½	640	444	...	196	Completed.
5. Do. Darmapuramatam to Sambankulam.	1½	1,415	365	...	1,050	Do.
6. Do. Sambankulam to Govindaperi.	4	317	280	...	37	Do.
7. Do. Govindaperi to Ravanasmudram.	2½	1,100	...	...	1,100	Almost completed.
8. Do. Papankulam to Alwarkurichi.	1½	779	450	...	329	Completed.
9. Do. Ambur to Papanasam ...	4	778	679	...	98	Do.
10. Do. Ambur to Sivasailam ...	5	1,425	300	...	1,000	Vide G. O., No. 102, dated 18th May 1875; other receipts expected.
11. Rangasmudram road	3	2,390	...	2,156	...	Do. In progress.
12. Pananjadi road	1½	1,480	...	1,506	...	
13. Pallakal do.	3	1,850	...	996	...	Completed.
14. Yekambrapuram road	1	193	100	...	93	
15. Repairs to bridges across Kandiankal in the limits of Kalladakurichi.	...	1,525	500	237	277	In progress.
16. Tank improvements in Papagudi.	...	...	...	600	...	Other receipts due—G. O., No. 102, dated 18th May 1875. In progress.
17. Ambasamudram, improving village site.	...	233	100	...	133	Completed.
18. Repairing square tank of Ambasamudram.	...	...	200	...	500	Do.
19. Kalladakurichi, improving village site.	...	305	50	34	221	Do.
20. Alwarkurichi, improving village site.	...	136	50	...	86	Do.
Total ...	33½	19,818	3,718	6,313	10,937	

16. I beg leave to bring to your notice the valuable assistance I have received from Narayanasami Mudali, Tahsildar of Ambasamudram, who has spared neither time nor trouble in hastening on the works that have been undertaken, and also from Krishnasami Iyengar, Head Classifier, who was unremitting in his exertions until he unfortunately fell ill.

17. I enclose a sketch map showing the locality of the chief works above mentioned.

(True Copy.)

(Signed) W. H. COMYN,
Acting Collector.

ENCLOSURES Nos. 4 and 5.—Maps.

With the foregoing letter the late Acting 3rd Member of the Board in charge of the Settlement Department submits the report of the Additional Sub-Collector of Tinnevelly on the settlement of that portion of the Ambasamudram Taluk which lies north of the Tambrapurni. It will be submitted to Government with the following remarks.

2. The charges made as regards clubbing of villages appear to be small. They are given in detail in the statements disposed of in the Board's Proceedings above read, and the most important of them consist in the division of some villages amalgamated at survey and the transfer of outlying blocks inconveniently situated with reference to the villages to which they were attached. Only four small villages have been got rid of by clubbing. The tract reported on contains forty-six revised villages.

3. The grouping of the villages is detailed in paragraph 5 of Mr. Arundel's report. Of the irrigated villages, three are placed in the first group, ten in the second, and twelve in the third. The remaining twelve are dry villages placed in the third group. The Board have no means of criticising this arrangement or of comparing it with Mr. Puckle's original proposals; but, as he has passed it without remark, it may they presume be accepted.

4. The following abstract shows the proposed assessment in comparison with that of Fasli 1283:—

Area.	ASSESSMENT.	
	Fasli 1283.	Revised.
River-irrigated, 1st Crop ...	3,091	Rs. 85,905
Do. 2nd	3,091	{ 45,171
Rain-fed tanks, 1st	2,544	95,552
Do. 2nd	2,544	{ 39,448
Ruined tanks...	165	8,868
Irrigated by baling	225	{ 1,640
Garden	295	457
Dry lands	57,294	998
Total ...	73,614	800
		22,745
		20,592
		1,68,025
		1,68,355

5. Deducting from the assessment of Fasli 1283 fixed remissions amounting to Rupees 6,852, and from the revised demand Rupees 132, the assessment on lands taken up during settlement, the net increase is stated at Rupees 7,010 or 4·35 per cent. From the statement in the last paragraph it will be seen that the dry lands and the lands under rain-fed tanks have been relieved, and that the increase has been obtained on the river-irrigated land. The exact proportion cannot be stated, as the fixed remissions have not been distributed.

6. There is one item of the fixed remissions which requires some explanation, *viz.*, Curnams' salaries, Rupees 2,382. These must be remissions of the assessment on *putta* lands held by the Curnams, and consequently the sum will have to be paid hereafter by Government to the Village Service Fund. It therefore does not represent increase of revenue to Government, nor, since it is nearly a mode of paying wages, does it represent increased demand on the ryots. Hence the increase by settlement should be calculated independently of this item, and is reduced to 2·87 per cent.

7. The second crop charge has been compounded for in 13,001 acres, being the whole of the river-irrigated area except 90 acres and in 1,880 out of 2,544 acres under the rain-fed tanks. In the latter case the proportion was one-fourth of the first crop charge, and in the river-irrigated tract the composition was made as follows :—

	Area.	Per cent.
1	62	·4
1	1,456	11·2
1	3,112	24·0
1	3,229	24·8
1	5,142	39·6
	<hr/> 13,001	<hr/> 100·0

The single crop assessment has been raised from Rupees 85,905 to Rupees 95,552, and while 8,094 acres paid Rupees 45,171 for second crop in Fasli 1283, or Rupees 5·9-3 per acre, the charge on 13,001 acres under the composition has been Rupees 39,448 or Rupees 3·0-8 per acre. These figures explain the extent to which composition has been effected. The average assessment for the two crop is Rupees 10·5-0, which is, as Mr. Puckle points out, slightly less than the average for the tracts lower down the river when the irrigation is better. The single crop charges average Rupees 7·4-9 per acre.

8. The average charge for single crop under rain-fed tanks is Rupees 3·7-9, and that for two crops on lands compounded for Rupees 4·5-9 (not Rupees 4·2-1). These rates are very moderate, but the tanks are apparently very small, the average *ayacut* being only 17 acres.

9. The specially irrigated lands do not call for notice. The dry lands are lightly assessed to an average of Rupees 0·5-9 per acre.

10. The palmyra tax on *putta* lands has been consolidated for Rupees 5,254, which is Rupees 1,104 in excess of the previous tree tax. New accounts have been drawn up for the tax on palmyras on other lands, and have brought in an increase of 80,707 trees and Rupees 4,352 of revenue. The total palmyra revenue in the tract is Rupees 12,046. The old revenue was Rupees 6,590.

11. Building sites have been extended where necessary, samudayam lands have been divided, and puttas revised. No grazing grounds have been assigned ; but Mr. Puckle states that it was his intention to form village reserves for wood, fuel, and grazing in the hill foot villages as was done in Tenkasi ; and that preliminary arrangements were made. The Board highly approve of this system, and the Collector should arrange to have these reserves marked out as soon as possible.

12. The report is deficient in detail of the old assessments which, by enabling comparisons to be made, would facilitate judgment as to the real effect of the revision. The results of operations in the tract now reported should be included when the taluk is completed, and particulars of the old revenue collections for ten years should be given. It is not stated whether village memoirs have been prepared as usual. The Board presume that they are under preparation.

13. In a separate report Mr. Arundel gives details regarding expenditure of funds derived from village subscriptions, grants from Local funds, and proceeds of sale of land, and trees upon works of improvement in the villages reported on. The villagers contributed Rupees 10,937, the Local Fund Board granted Rupees 8,718 for village roads ; and lands and trees sold brought in Rupees 6,313 ; total Rupees 20,968. From this sum, an anicut costing Rupees 1,550 was built across the Rawanadi, with the construction of which water disputes of long standing have ceased $3\frac{1}{2}$ miles of village roads have been formed, and tanks and village sites have been improved.

14. These works will doubtless prove of great benefit to the villagers concerned, and they reflect the greatest credit on Mr. Arundel's energy and devotion. Mr. Puckle, who is well acquainted with the country, bears unreserved testimony to their utility, and looking at the map the roads appear to have been very judiciously laid out.

15. The Board however wish to have information as to the extent and character of the lands the occupancy-right of which has been sold, and the number of trees, presumably the property of Government which have been disposed of. Also whether the assessment to be realized on the lands is included in the Settlement results as reported.

16. The Board observe that as a very special case and in consideration of his personal fitness, Mr. Puckle was allowed a discretion to raise and expend funds for works of village improvement and they are of opinion that in future preliminary sanction should be obtained before further operations of the kind are undertaken in connexion with the Tinnevelly settlement.

17. The Board await the promised report on the lands referred to in paragraph 24 of Mr. Arundel's letter of the 19th June 1875, No. 110.

(A true Copy and Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

To the Acting Secretary to Government, Revenue Department,

with two maps, to be returned, and copy of

Board's Proceedings, Miscellaneous

No. 6,259, dated 12th July 1875.

.. the Director of Revenue Settlement.

.. the Collector of Tinnevelly.

Exd. W. J. Lewis.

1875.

Board of Revenue

MADRAS.

PROCEEDINGS, 1st SEPTEMBER 1875, No. 2,457

Instl.



Received

SEPTEMBER.

No. 2,457.

Settlement—of the Northern portion
basanudram taluk in Tinnevelly District.—
Letter from Director of Revenue Settlement
forwarding report of Additional Sub-Collector
on—submitted to Government with certain
remarks.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 25th September 1876.

Read the following letter from C. RUNDALL, Esq., Acting Director of Revenue Settlement, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Madras, 15th July 1876, No. 2,800-78 :—

In his letter of the 14th April 1875, No. 724-21, recorded in Board's Proceedings, No. 1,217, dated 10th May 1875, Mr. Puckle reported the result of the introduction of the new rates into the villages situated under the South Main Channel of the

Streeviguntam Anicut in the Tenkarai
Dated 25th October 1875. Taluq of the Tinnevelly District, and Mr.

Comyn has submitted a Memorandum for the entire taluq, which I have the honor to forward with a few observations.

2. The whole taluq is divided into seven tracts for settlement purposes. They are :—

- (1.) Villages under the Maradur Milkal.
- (2.) Do. do. do. Kilkal.
- (3.) Do. do. Streeviguntam Anicut North Main Channel.
- (4.) Do. do. do. South do.
- (5.) South Ponnekulam or Dry Villages.
- (6.) North do. or do.
- (7.) "Teri" or Palmyra Forest.

These tracts contain 133 villages distributed into three groups as under :—

River-irrigated tracts 79, 2nd group.

Do.	do.	6,	3rd	do
Ponnekulam	do.	27,	3rd	do.
Teri tract		21,	4th	do.

3. The following abstract exhibits the area and assessment under the old and the new régime separately for each tract and collectively for the entire taluq, distinguished under the heads dry and wet and both together :—

Tracts.	Name.	Dir.				W.E.R.				Total.			
		Average per Acre.		Direct flow.		Baling.		Total.		Average per Acre.		Extent.	
		Extent.	Assess-ment.	Extent.	Assess-ment.	Extent.	Assess-ment.	Extent.	Assess-ment.	Extent.	Assess-ment.	Extent.	Assess-ment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Maradur Millal ..	Revenue	Rs. 8,958	Acres. 3,597	Rs. 0 6 5	Acres. 9,411	Rs. 1,19,372	Acres. 140	Rs. 693	Acres. 9,551	Rs. 1,19,965	Acres. 12 9 0	Rs. 18,509	Acres. 1,28,562
	Settlement	9,687	3,413	0 5 8	9,363	1,10,155	157	695	10,020	1,10,660	11 1 0	19,057	1,14,263
	Difference	+ 679	-	184	+ 452	- 9,217	+ 17	+ 102	+ 469	- 9,115	+ 5	+ 1,148	- 9,399
	Percentage	+ 6	-	5	+ 5	- 3	12	17	5	8	..	..	6
Do. Kilkal	Revenue	10,898	6,720	0 8 5	7,950	1,06,203	240	7,490	1,07,805	14 5 8	18,318	1,18,225	
	Settlement	12,382	5,727	0 7 5	7,544	97,407	263	1,349	7,797	68,766	12 10 8	20,179	1,04,483
	Difference	+ 1,554	+ 7	+ 294	- 8,796	+ 13	+ 47	+ 307	- 8,749	8	..	+ 1,861	- 8,749
	Percentage	+ 14	-	4	8	5	4	4	4	8	..	..	10
Streetenant Ani- out North Main Channel.	Revenue	10,363	6,766	0 10 6	5,099	66,540	493	2,376	5,592	58,916	10 8 7	16,047	65,481
	Settlement	11,822	6,780	0 9 7	5,586	65,120	528	2,619	6,114	67,789	11 1 3	17,486	74,519
	Difference	+ 969	+ 15	+ 15	+ 487	+ 8,580	+ 35	+ 233	+ 522	+ 8,634	..	+ 1,491	+ 8,838
	Percentage	+ 9	-	1	1	15	7	10	9	15	..	..	10
Do. South Main Channel.	Revenue	22,441	7,322	0 5 8	9,492	83,409	811	3,023	10,303	85,487	8 4 8	32,744	92,759
	Settlement	23,272	12,875	0 8 10	10,316	1,10,832	906	3,835	11,322	1,14,070	10 8 6	34,194	1,27,545
	Difference	+ 831	+ 5,553	+ 10	+ 824	+ 28,428	+ 95	+ 814	+ 919	+ 29,933	..	+ 1,750	+ 34,786
	Percentage	+ 4	+ 76	..	9	35	12	27	9	35	..	..	4
South Ponnalam or Dry Villages.	Revenue	41,830	11,467	0 4 5	3,172	21,248	710	4,562	8,863	25,805	6 10 4	45,712	37,272
	Settlement	45,153	13,011	0 4 7	3,579	17,775	813	3,368	4,332	21,143	4 13 3	49,545	34,154
	Difference	+ 3,323	+ 1,544	+ 18	+ 407	- 3,468	+ 103	- 1,194	+ 510	- 4,662	..	+ 3,888	- 8,118
	Percentage	+ 8	-	13	13	16	15	26	13	18	..	..	8
North do. do...	Revenue	25,624	18,213	0 11 4	1,126	5,487	..	..	1,156	5,487	4 14 0	26,850	23,700
	Settlement	26,440	18,492	0 11 2	1,220	5,194	..	..	1,220	5,194	4 4 1	27,660	23,686
	Difference	+ 616	+ 279	+ 2	+ 94	- 293	5	..	+ 94	- 293	..	+ 710	- 14
	Percentage	+ 2	-	..	..	8	5	..	8	5	..	3	..
Teri or Palmyra Fo- rest.	Revenue	50,757	11,903	0 3 9	2,889	1,385	8,138	1,729	11,027	6 6 1	52,486	32,930	
	Settlement	46,717	12,322	0 4 2	464	2,584	1,463	5,069	7,653	6 0 9	48,644	19,975	
	Difference	- 4,040	+ 419	+ 4	+ 70	- 305	+ 128	- 3,069	+ 198	- 3,374	..	- 3,842	- 2,965
	Percentage	+ 8	-	..	18	11	9	38	12	30	..	..	7
Total	Revenue	170,391	64,987	0 6 1	35,344	3,94,143	3,729	19,939	39,673	4,14,142	10 7 0	2,10,664	4,79,129
	Settlement	174,923	72,620	0 6 8	38,572	4,09,067	4,120	16,938	42,692	4,26,005	9 15 7	2,17,615	4,98,625
	Difference	+ 3,932	+ 7,633	+ 2	+ 2,628	+ 14,924	+ 391	- 3,061	+ 3,019	+ 11,863	..	+ 6,951	+ 19,496
	Percentage	+ 2	-	12	7	4	10	15	8	3	..	..	3

	rs.
Chaturbhagam	2,460
Dupatimaniem	1,498
Total ...	3,958

4. It will be seen that on the whole there is a net increase of Rupees 19,496 or Rupees 23,454 if the fixed remissions as per margin be deducted from the revenue beriz before comparing the same with the revised demand.

5. Viewing the results by tracts the new settlement has occasioned a decrease in the assessment of the irrigated lands of all the tracts save those under the Streeviguuntam Anicut. The increase under the latter more than covers the decrease in the other tracts, and indicates a substantial net increase on the whole taluq as above specified. Save in one tract, the dry lands aided the increase. Had it not been for the Streeviguuntam Anicut works, and the extended irrigation afforded, the reduction of assessment in the taluq must inevitably have been considerable instead of the net increase of Rupees 23,454 as above shown. Mr. Comyn reckons that the decrease might probably have been Rupees 30,000.

6. The deficiency in the assessment of the wet lands refers mainly to the tracts irrigated under the Maradur Milkal and Kilkal, and is due to the hitherto prevailing rates being very high in these tracts. The average rates of the foregoing tracts and as well those under the Streeviguuntam Anicut are compared below:—

Tracts.	By Revenue.			By Settlement.		
	RS.	A.	P.	RS.	A.	P.
Maradur Milkal	12	9	0	11	1	0
Do. Kilkal	14	5	8	12	10	8
Streeviguuntam { North Main Channel.	10	8	7	11	1	3
Anicut. { South do. do:... ...	8	4	8	10	3	6

7. In his letter already quoted, Mr. Puckle entered into full particulars of the history and construction of the Streeviguuntam Anicut, and the advantages derived or to be derived therefrom, and I therefore only refer to the enhancement of assessment due to the actual improvements. At paragraph 12 of his Memorandum, Mr. Comyn points out that in calculating the return from the lands under the South Main Channel, Mr. Puckle included the increase of Rupees 7,228 on the dry lands which should not have been credited to the project. He also points out that the amount of increase shown on the wet lands at that time was reduced by Rupees 2,172 in the final hearing of appeals, thus reducing the contemplated gain of Rupees 38,363 to Rupees 28,963, or 5 per cent. on the moiety of the outlay of 10 lakhs of Rupees instead of 7 per cent. as reckoned by Mr. Puckle. In this comparison, however, Mr. Comyn omits from his calculations the results of the wet lands under baling.

8. The expected gain by improvements to the villages under the North Main Channel extending as far as the limits of the Tenkarai Taluq was Rupees 12,000, but for obvious reasons given in Mr. Comyn's report it amounts to Rupees 8,580, as effect could not be fully given to the proposed improvements.

9. There are lands in the Ottapidaram Taluq also that are likely to be benefited by the North Main Channel, and until the scheme can be extended, and the settlement of the villages undertaken, the probable return from this channel cannot be calculated.

10. Before proceeding further, it is necessary to remark that the comparison instituted by Mr. Comyn is between the revenue details of Fasli 1283 and the settlement results of Fasli 1284, and that consequently the comparison is not on identical areas. In other words, the occupation and assessment of 1873 is contrasted with that of 1874 as adjusted at Jamabandi by transfers, relinquishments, and durkhasts. I have therefore since obtained detail statements furnishing a comparison of the revenue and settlement demands on the occupation of Fasli 1284. This has occupied some time as the revenue details were not originally worked out for Fasli 1284, or this report might have been submitted at a much earlier date.

11. The annexed abstract gives the particulars as thus worked out :—

Tracts.	Item.	Dri.	Extent.	Assess- ment.	Average per Acre.	W.R.				Total.				Average per Acre.		Extent. Assess- ment.	Assess- ment.	TOTAL.		
						Direct flow.				Baling.				ACRES.		RS.		ACRES.		
						6	7	8	9	6	7	8	9	10	11	12	13	14	15	16
Madar Milkal ...	Revenue		8,958	2,817	Rs. A. P.	9,411	1,20,401	1,70,155	155	600	9,551	1,21,001	12,10	8	ACRES.	RS.	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.
	Settlement		9,637	3,413		0 5 0	0 5 9	9,863	+	695	10,018	1,10,850	11 1	0	1,28,818	18,609			19,655	1,14,263
	Difference		+ 679	+ 596		0 5 9	0 5 9	+ 452	+	95	+ 467	- 10,151	...	...	...	...			+ 1,146	- 9,565
	Percentage		+ 8	21		...	...	5	+	11	16	+	5	8	...	...			...	6
Do. Kilkil ...	Revenue		10,828	5,066	Rs. A. P.	7,250	1,07,230	97,408	240	1,369	7,490	1,05,599	14 7	11	ACRES.	RS.	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.
	Settlement		12,382	6,727		0 7 6	0 7 5	7,545	254	1,349	7,799	98,757	12 10	8	18,318	1,13,665			20,181	1,04,484
	Difference		+ 1,554	+ 661		0 7 5	0 7 5	+ 295	+	14	- 20	+	309	- 9,842	...	...			+ 1,863	- 9,181
	Percentage		+ 14	13		...	...	4	9	6	1	4	9	...	...	...			10	8
Streetignam Ani- cut North Main Channel.	Revenue		9,786	5,606	Rs. A. P.	5,066	57,918	493	2,460	5,559	60,878	10 13	9	15,345	65,984	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.	
	Settlement		11,822	6,750		0 9 7	0 9 7	5,586	65,120	528	2,619	6,114	67,739	11 1	3	17,436	74,519			...
	Difference		+ 1,636	+ 1,174		...	...	+ 520	+	7,202	+ 35	+ 169	+ 555	+ 7,361	...	...	+ 2,091		+ 8,585	
	Percentage		+ 16	21		...	...	49	12	7	7	10	12	...	...	...	14		11	
Do. South Main Channel.	Revenue		16,484	6,872	Rs. A. P.	7,760	87,505	665	8,226	8,446	90,781	10 11	11	24,929	97,103	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.	
	Settlement		23,222	12,876		0 8 10	10,316	10,832	905	3,328	11,222	1,14,670	10 3	6	84,494	1,27,545			...	...
	Difference		+ 6,788	+ 6,508		...	...	+ 2,536	+	23,327	+ 241	+ 612	+ 2,777	+ 23,939	...	...			+ 9,565	+ 80,442
	Percentage		+ 41	100		...	...	33	27	36	19	33	26	...	...	...			38	31
South Ponnerlam or Dry Villages.	Revenue		41,898	10,834	Rs. A. P.	3,172	22,021	710	4,675	3,882	26,696	6 14	0	45,710	37,530	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.	
	Settlement		45,153	13,011		0 4 2	0 4 7	3,579	17,774	813	3,368	4,392	21,142	4 18	3	49,545	34,158			...
	Difference		+ 3,335	+ 2,177		...	...	+ 407	- 4,247	+	103	- 1,307	+ 510	- 5,554	...	...	+ 3,835		- 3,877	
	Percentage		+ 8	20		...	...	13	19	15	15	28	13	21	...	...	6		9	
North do. do. ...	Revenue		25,874	17,561	Rs. A. P.	1,126	5,864	...	...	...	...	...	1,126	5,864	6 7	7	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.
	Settlement		26,440	18,492		0 11 2	1,220	5,194	...	...	...	...	1,220	5,194	4 4	1			26,950	23,425
	Difference		+ 616	+ 931		...	...	+ 94	- 670	...	...	+	94	- 670	...	...			+ 710	+ 261
	Percentage		+ 2	5		...	...	8	11	11	10	10	8	11	...	...			7	1
Tenor Palmyra Fo- rest.	Revenue		50,757	11,549	Rs. A. P.	0 10 11	3,94	3,015	1,835	8,183	1,729	11,198	6 7	7	52,486	22,747	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.
	Settlement		46,717	13,322		0 4 2	464	2,584	1,463	5,069	1,927	7,653	6 0	9	48,644	19,975			...	...
	Difference		+ 4,040	+ 773		...	...	+ 79	- 481	+	128	- 3,114	+ 198	- 3,545	...	...			- 3,842	- 2,778
	Percentage		+ 8	7		...	...	12	14	10	10	11	11	32	...	...			7	1
Total	Revenue		1,64,465	59,805	Rs. A. P.	0 5 10	34,199	4,03,954	3,583	20,513	37,783	4,24,467	11 3	9	2,02,247	4,84,273	Extent. Assess- ment.	Assess- ment.	ACRES.	RS.
	Settlement		1,74,923	72,620		0 6 8	38,573	4,09,067	4,119	16,936	42,692	4,26,005	9 15	7	2,17,615	4,98,625			...	...
	Difference		+ 10,458	+ 12,815		...	...	+ 4,374	+ 5,113	+ 536	- 3,575	+ 4,910	+ 1,538	13	17	13			+ 15,368	+ 14,353
	Percentage		6	21		...	...	13	1	15	17	13	13	...	...	...			8	3

12.	This view of the results brings out for the whole a net increase of Rs. 15,851,
Net Revenue beriz, deducting Dupati-	Rs.
maniem 4,82,774	
Net Settlement beriz 4,98,625	
Difference ... 15,851	

Anicut, and which have not therefore been added on the revenue side as was done by Mr. Comyn; but there are two other items which he has likewise treated and are now added on both sides. These make up the difference above noticed as specified below:—

1. Assessment of durkhast lands in tracts other than those under the Streeviguntam Anicut	Rs. 6,041
2. Difference of assessment between Jamabandi beriz and the estimated demand on the lands transferred from dry to wet...	1,562
Total ...	7,603

13. Mr. Bird explains that the foregoing two items "are due partly to the ryots being encouraged by fair rates to extend the margin of cultivation and partly to the improved irrigation under the Streeviguntam Anicut which enable them to transfer dry lands to wet," and "consequently" he thinks that "the increase to revenue by transfers from dry to wet and by these durkhast lands might have been treated exactly in the same manner as increase under the anicut in question, and they have been so treated for all intents and purposes".

14. There is some force in what Mr. Bird says, and the results of the two systems of comparisons may be said to be much the same, or in other words the revenue beriz of Faslis 1283 and 1284 may be presumed to have varied but little had not the settlement been introduced and the anicut works had force.

15. In the same manner the gain under the Streeviguntam Anicut by comparison of the identical areas, including the durkhast lands due purely to improvement works, amounts to Rupees 34,095, or Rupees 3,448 less than the sum shown by Mr. Comyn. Mr. Bird's explanation applies to this equally.

16. Out of the 38,572 acres of land irrigated by the river channels, Ponnelukam, and ooze-springs, 30,585 acres have been compounded for at rates varying from $\frac{2}{3}$ to $\frac{1}{4}$ according to the table, and the results shown above included the second crop charge.

17. The area and assessment falling under each money rate is given in the subjoined abstract:—

IRRIGATED.					DRY (INCLUDING GARDEN LAND.)				
Rate.	Area.	Percentage.	Asses- ment.	Percent- age.	Rate.	Area.	Percent- age	Assess- ment.	Percent- age.
RS. A. P.	ACRES.		RS.		RS. A. P.	ACRES.		RS.	
17 8 0	4,716	11	82,526	19	5 0 ■	138	...	691	1
15 12 0	3,171	7	49,957	12	3 8 ■	376	...	1,315	3
13 8 0	8,451	■■	1,14,078	27	2 8 0	1,156	1	3,893	6
10 0 0	8,076	19	80,766	19	1 8 0	6,193	5	9,290	18
9 0 0	118	...	1,062	...	1 0 0	11,856	7	11,907	16
7 8 0	4,820	11	36,156	9	0 12 0	6,574	3	4,934	7
6 ■ 0	1,924	5	11,514	3	0 9 0	12,677	7	6,245	9
5 10 0	1,722	4	9,694	2	0 6 ■	23,064	13	8,676	11
4 8 0	8,819	9	17,181	4	0 4 0	77,756	44	19,507	27
4 6 0	253	1	1,111	...	0 8 0	35,003	20	6,612	9
3 12 0	20	...	75	...					
3 8 0	1,041	2	3,641	1					
3 0 0	842	1	1,027	...					
2 8 0	99	...	247	...					
Total	38,572	90	4,90,067	96					
Baling	4,120	10	16,938	4					
Grand Total ...	42,692	100	4,26,005	100	Total ...	1,74,923	100	72,620	100

18. Twenty per cent. of the wet area falls under Rupees 13-8-0, and almost as much under Rupees 10. The next largest area appears under Rupees 17-8-0 and Rupees 7-8-0, in each case the percentage being 11 per cent. These rates are of course for two crops. Eighty-four per cent of the dry lands is rated at or below 8 Annas.

19. The remarks of Mr. Comyn in paragraph 16 of his Memorandum need attention. The villages of Ottapidaram Taluq to be influenced by the Streeviguntam Anicut should certainly be dealt with as early as practicable. The party is now engaged on the revision of Nanguneri classification, and Mr. Puckle will shortly be able to regulate the work in the manner best suited to the necessities of the district, which he is so well acquainted with.

20. The treatment of palmyras is fully described by Mr. Comyn in paragraph 27 of his Memorandum, and there is seemingly an immediate addition of Rupees 8,860 to the revenue under this head.

21. Owing to the introduction of settlement being merged with and carried out concurrently with the Jamabandi in Tinnevelly, a direct comparison of the revenue and settlement results is rendered impossible. It has been found impracticable to show the actual area converted from single to double crop, and the results in Tinnevelly are materially effected by such adjustments.

ENCLOSURE No. 1.

Memorandum on the Settlement of Tenkarai Taluq and its Financial Results.

AREA.—The Tenkarai Taluq has an area of 518 square miles, and is irrigated by the Tambrapurni river, which after passing through Ambasamudram and Tinnevelly Taluqs, and receiving the water of an important affluent—the Chittar—reaches Tenkarai, and, flowing through the taluq, finds its way into the sea.

2. VILLAGES, RECTIFICATION OF THEIR BOUNDARIES AS PER SETTLEMENT.—This taluq with the addition of villages and hamlets from Nanguneri, and Tinneyelly Taluqs formerly contained 197 villages intermixed with each other in the same bewildering manner as that described in

Embodying in Proceedings of Government, Revenue Department, dated 5th March 1875.

paragraph 3 of Mr. Puckle's report* on the settlement of Tenkasi and Tinnevelly. The boundaries have been rectified by clubbing and

sub-dividing the old villages in the same manner as that adopted in those taluqs so as to make the villages thus newly formed as compact as possible, in view to the efficient working of the revised village establishment and to the convenience of the villagers. The rectification of the village boundaries has been made with the consent of the villagers concerned, except in one or two isolated cases, in which the objections raised were groundless. This matter has already been reported on to the Director of Revenue Settlement in my letters, Nos. 624 and 915, dated 8th July and 2nd October 1875, with which were forwarded the reports of the Special Assistant for Settlement on the subject. The total number of villages has been reduced by the above rectification from 197 to 133.

3. IRRIGATION.—The 7th and 8th anicuts on the Tambrapurni, viz., the Maradur and Streeviguntam Anicuts, supply the river valley of this taluq with four main channels, viz., the "Milkal" and "Kilkal" from the Maradur and lower down the river "the North and South Main Channels" from the Streeviguntam Anicut. Many of the wet lands thus supplied are irrigated direct by other channels and their branches, but the greater extent is irrigated by the river water stored in tanks.

The high level plains are irrigated by what are termed "Ponnekuam" or rain-fed tanks, and the "Teri" or sand hills by ooze-springs.

4. DIVISION OF TALUQ INTO TRACTS FOR SETTLEMENT PURPOSES.—The taluq may, for the purposes of settlement, be conveniently divided into seven tracts, viz:—

(a.) River-irrigated—

1. Villages under the Maradur Milkal.
2. Do. do. do. Kilkal.
3. Do. do. Streeviguntam North Main Channel.
4. Do. do. do. South do. do.

(b.) Dry Villages—

5. South " Ponnekulam " or Dry Villages.
6. North do. or do.
7. "Teri" or Palmyra Forest.

5. VILLAGES GROUPED.—The 133 villages comprised in the taluq have been placed as to irrigation in the 2nd, 3rd, and 4th groups as follows:—In the first four river-irrigated tracts above mentioned, 79 villages fall in the 2nd group and 6 in the 3rd group. On the north and south Ponnekulam tracts, 27 in the 3rd and in the Teri tract 21 in the 4th group.

6. DURATION AND CONDUCT OF SETTLEMENT.—The settlement of this taluq was commenced in January 1874 and has only recently been concluded, the fair puttias having been distributed and the Jamabandi closed by the end of September 1875.

The conduct of the settlement was entrusted to and its operation carried on by the Special Assistant T. Venkatachariar under the orders of the late Collector Mr. Puckle up to the time of his departure from the district at the end of last year, and subsequently under my directions. Mr. Puckle with the Special Assistant inspected the southern tracts, viz., the villages under the South Main Channel of the Streeviguntam Anicut, the palmyra forest, and the dry villages to the south; clubbed and sub-divided the villages for settlement purposes, had the blocks laid out for settlement, determined the rates, and distributed the rough puttias in these tracts. I have had the same thing done for the rest of the taluq. Finally, I spent three months in the taluq, visiting and inspecting all the villages under the North and South Main Channels of the Streeviguntam Anicut, most of those under the Maradur Milkal and Kilkal, and some of the northern dry villages, in company with the Special Assistant and the ryots; heard and disposed of the objections of the ryots of those villages (as well as of those which I did not personally inspect) to the proposed rates, made such reductions or alterations as the circumstance of each case demanded, and having thus carefully revised the settlement operations of the whole taluq and heard all the Takavars, finally distributed the fair puttias for Fasli 1284 according to the settlement rates, and so introduced the settlement into the taluq.

7. DAY IN COMPLETING THE SETTLEMENT.—It was hoped that it would be possible to complete settlement operations so as to allow of the distribution of fair puttias within the close of the fasli, but on account of the large extent of the taluq, the arduous nature of the work, the difficulty in adjusting claims to shares of palmyras, and, finally, the almost interminable objections which were raised by the ryots to the rates before the final distribution of puttias, and the personal inspection of the lands and revision of the proposed assessment which, under the circumstances, I deemed it necessary to make, it was not found possible to complete the settlement and the Jamabandi on it before the end of September.

8. OBJECTIONS TO RATES OF ASSESSMENT.—In the majority of cases I found the objections raised to the rates to be groundless, but in many cases I found it necessary to make certain corrections and alterations. There is no doubt that the ryots were discouraged by the failure of river freshes and the occurrence of a bad season, the Kar crop having unfortunately failed, and regarded the introduction at such a time of the new settlement, together with the imposition of the village service cess, with suspicion and disfavor. In some villages they went so far as to refuse to accept puttias stipulating for a further reduction in the rates of assessment, but I discovered that this was the result of a conspiracy; the villages in which puttias were refused, though situated in different parts of the taluq, having among the most influential of their ryots,

inhabitants of Alvatinnagiri, who, even where a considerable reduction below the old Jamabandi rates was effected by settlement, refused to accept puttias in hopes of getting a still further reduction. Many of the ryots of these villages who were willing to accept puttias held back through fear of the more influential ryots who refused. In one village (Mangalakurichi) under the Streeviguuntam Anicut North Main Channel the ryots declined to take their puttias on account of the enhancement of the beriz of their village by settlement, which was due not so much to actual increase in the tarams as to increase of area by survey measurement. The imposition of the village service cess at one anna in the rupee, the introduction of which concurrently with the settlement of each taluk was sanctioned in G.O., No. 1,574, dated 18th November 1872, was very distasteful to the ryots, but I do not think that had the season been a good one, any obstinacy in the matter of taking puttias would have manifested itself, and on the whole, from what I have been able to gather, the ryots are well satisfied with the rates imposed.

9. MODE OF SETTLEMENT ADOPTED.—The principles on which the settlement of this taluk Proceedings of Government, Revenue Department, 5th March 1875, No. 360. has been made are the same as those described by Mr. Puckle in his report on the settlement

of Tenkasi and Tinnevelly (paragraphs 6—8) with one exception, viz., that the rate of compounding adopted for the second crop charge on Nunjah lands of the highest class in the villages of the 2nd group under the Streeviguuntam Anicut is $\frac{1}{2}$ instead of $\frac{3}{4}$ charge on the same class of the same group in the village under the upper anicuts. The lower rate of composition was adopted as the Streeviguuntam Anicut, being the last of the series, does not command the same advantages of irrigation as the upper anicuts during the Kar or second crop season. The rate was fixed by Mr. Puckle on mature consideration in the villages under the South Main Channel, and the same rate of compounding has been adopted in the villages under the North Main Channel also.

10. CLASSIFICATION OF SOILS IN THE RIVER-IRRIGATED TRACT.—The following table shows the classification of soils of the river-irrigated lands in the different tracts of the river valley, 2nd and 3rd groups:—

Group.	CLASSIFICATION.		Maradur Milkal	Maradur Kilkal.	Streeviguuntam Anicut South Main Channel.	Streeviguuntam Anicut North Main Channel.	Total.
	Class.	Sort.					
2nd Group.	4	1	2,011	2,705	1,968	1,203	7,887
	4	2	2,679	2,135	1,400	1,780	7,994
	4	3	2,117	1,271	1,924	1,204	6,516
	4	4	830	45	870	331	2,076
	4	5	225	...	15	210	450
	5	1	56	47	...	...	103
	5	2	...	48	...	...	48
	7	1	...	52	473	4	529
	7	2	5	170	1,013	153	1,341
	7	3	132	86	509	508	1,235
	7	4	157	...	461	...	618
	7	5	31	...	...	...	31
	8	1	...	...	470	2	472
	8	2	...	...	331	...	331
	8	3	...	...	426	191	617
			8,243	6,559	9,860	5,586	30,248
3rd Group.	4	1	31	15	...	...	46
	4	2	130	26	...	...	156
	4	3	90	100	...	...	190
	4	4	172	...	...	...	172
	7	1	...	38	...	...	38
	7	2	192	...	...	...	192
	7	3	278	...	...	...	278
	8	4	15	..	...	...	15
			908	179	...	...	1,087
			9,151	6,738	9,860	5,586	31,335

11. ASSESSMENT.—The assessment of the river-irrigated lands is shown in the accompanying table:—

Tracta.	Group.	RATE PER ACRE.			Area in Acres.	ASSESSMENT.			Average rate per Acre.
		For 1st Crop.	For 2nd Crop.	1st Crop.		2nd Crop.	Total.		
Kilkal.....	2nd	RS. A P.	RS. A P.	RS.	RS.	RS.	RS.	RS. A P.	
		10 8 0	7 0 0	2,705	28,406	18,987	47,343	14 1 2	
		9 0 0	4 8 0	2,069	18,624	9,309	27,933		
		9 0 0	... ...	118	1,062	...	1,062	
		7 8 0	2 8 0	1,384	10,381	8,462	18,843		
		7 8 0	... ...	104	779	...	779	
		6 0 0	1 8 0	179	1,072	268	1,340		
		... ... ..	... ... ..	6,559	60,324	31,976	92,300
		9 0 0	4 8 0	15	135	71	206		
		7 8 0	2 8 0	64	479	160	639		
Do.	3rd	6 0 0	1 8 0	100	601	150	751	8 14 8	
		... ... ..	... ... ..	179	1,215	881	1,596
		... ... ..	... ... ..	6,738	61,539	32,857	93,896
		10 8 0	7 0 0	2,011	21,112	14,073	35,185		
		9 0 0	4 8 0	2,679	24,106	12,051	36,157		
		7 8 0	2 8 0	1,652	12,392	4,133	16,525		
		7 8 0	... ...	526	8,946	...	8,946	
		6 0 0	1 8 0	860	5,161	1,289	6,450		
		6 0 0	... ..	102	613	...	613	
		4 8 0	1 2 0	347	1,563	392	1,955		
Milkal.....	2nd	4 8 0	36	158	...	158	13 15 0	
		3 8 0	0 14 0	81	108	27	185		
		... ... ..	... ... ..	8,243	69,159	31,965	1,01,124
		9 0 0	4 8 0	31	282	141	423		
		7 8 0	2 8 0	130	976	326	1,303		
		6 0 0	1 8 0	89	534	184	668		
		6 0 0	... ..	193	1,157	...	1,157	
		4 8 0	1 2 0	231	1,040	263	1,303		
		4 8 0	... ...	219	983	...	983	
		3 0 0	... ...	15	46	...	46	
Do.	3rd	908	5,018	863	5,881	6 7 8	
		... ... ..	... ... ..	9,151	74,177	32,828	1,07,005
		10 8 0	5 4 0	1,968	20,669	10,835	31,004		
		9 0 0	4 8 0	1,873	16,884	8,427	25,281		
		7 8 0	2 8 0	3,407	25,549	8,520	34,069		
		6 0 0	1 8 0	1,450	8,701	2,175	10,876		
		6 0 0	... ..	260	1,580	...	1,580	
		4 8 0	1 2 0	374	1,683	422	2,105		
		4 8 0	... ...	528	2,877	...	2,877	
		... ... ..	... ... ..	9,860	77,893	29,879	1,07,272
South Main Channel.....	2nd	10 8 0	5 4 0	1,203	12,685	6,318	18,953	10 14 1	
		9 0 0	4 8 0	1,784	16,052	8,026	24,078		
		7 8 0	2 8 0	1,344	10,981	8,362	13,443		
		7 8 0	... ..	14	106	...	106	
		6 0 0	1 8 0	839	5,034	1,257	6,291		
		4 8 0	1 2 0	392	1,763	412	2,205		
		4 8 0	... ...	10	44	...	44	
		... ... ..	... ... ..	5,586	45,715	19,405	65,120
		10 8 0	7 0 0	4,716	49,518	33,010	82,528		
		... ... ..	5 4 0	3,171	38,304	16,653	49,957	
North Main Channel.....	2nd	9 0 0	4 8 0	8,405	75,636	37,813	1,13,449	11 10 6	
		9 0 0	... ..	118	1,062	...	1,062	
		7 8 0	2 8 0	7,787	58,403	19,477	77,880		
		7 8 0	... ..	644	4,831	...	4,831	
		6 0 0	1 8 0	8,328	19,968	4,989	24,957		
		6 0 0	... ...	363	2,173	...	2,173	
		4 8 0	1 2 0	1,118	5,009	1,256	6,265		
		4 8 0	... ...	573	2,579	...	2,579	
		3 8 0	0 14 0	31	108	27	185		
		... ... ..	... ... ..	30,248	2,52,591	1,13,225	8,65,816

Tracts.	Group.	RATE PER ACRE.		Area in Acres.	ASSESSMENT.			Average rate per Acre.
		For 1st Crop.	For 2nd Crop.		1st Crop.	2nd Crop.	Total.	
Total.....	3rd....<	RS. A. P. 9 0 0	RS. A. P. 4 8 0	46 194 189 193 281 219 15	RS. 417	RS. 212	RS. 629	RS. A. P.
		7 8 0	2 8 0		1,455	486	1,941	
		■ 0 0	1 8 0		1,185	284	1,419	
		6 0 0	... " ..		1,157	.....	1,157	
		4 8 0	1 2 0		1,040	262	1,302	
		4 8 0	... " ..		983	.....	983	
		8 0 0	... " ..		46	.....	46	
		... " ..	... " ..		6,233	1,244	7,477	6 14 1
Grand Total ...		... " ..	... " ..	1,087	81,335	2,58,824	1,14,469	3,73,293 11 14 7

12. INCREASE BY SETTLEMENT ON NUNJAH LANDS RIVER-IRRIGATED.—The assessment of these lands in Fasli 1283 was Rupees 3,52,187, by settlement it is Rupees 3,73,293, showing a net increase by settlement of Rupees 21,106.

This is made up of a net increase of Rupees 37,543 in the villages under the South and North Main Channels of the Streeviguntam Anicut and a net decrease of Rupees 16,437 in the villages under the Milkal and Kilkal of the Maradur Anicut. The increase of Rupees 37,543 above the heriz of Fasli 1283 consists of an increase of Rupees 28,963 under the South Main Channel and of Rupees 8,580 under the North Main Channel of the Streeviguntam Anicut. This increase is fair and is due to the improvement of irrigation secured by the anicut.

I may here note to an error which has crept into Mr. Puckle's letter to the Board of Revenue, embodied in the Proceedings of Government, Revenue Department, 19th July 1875. Mr Puckle, writing as Director of Revenue Settlement, put down Rupees 38,363 as the increase by settlement on the villages under the South Main Channel, and has accordingly credited the project with a return of upwards of 7 per cent. on a moiety of the outlay, viz., 5 lakhs of rupees, but this figure includes the increase on Punjab lands, amounting to Rupees 7,228, which cannot properly be credited to the anicut project; deducting this figure, the expected increase by settlement on the Nunjah alone would be Rupees 31,135, but the actual increase on the Nunjah according to the final puttias, and after the necessary revision, amounts to Rupees 28,963 as shown above.

13. AVERAGES UNDER STREEVIGUNTAM ANICUT.—The average assessment in the ten tracts under the Streeviguntam anicut, viz., Rupees 10-14-1 and Rupees 11-10-6, respectively, per acre, though it appears high, is not by any means excessive when the advantages derived from the project are taken into consideration.

AVERAGES UNDER STREEVIGUNTAM ANICUT COMPARED.—The higher average under the North Main Channel is attributable to the fact that only the lands in the Tenkarai Taluq which are affected by it have been taken into the calculation. These lands are nearest the head of irrigation, and there is a large extent of country which being beyond the limits of Tenkarai and situated in the Ottapidarum Taluq has not yet been settled, but which has yet to be benefited by the anicut. This tract being further from the head of irrigation and containing lands of inferior quality will be rated lower, and the result will be a total average under the North Main Channel which will probably be about the same as that resulting from the South Main Channel. All the lands irrigated by the latter channel are situated within the limits of the Tenkarai Taluq, and have been included in the settlement, and comparatively low rates have been fixed on the lands of inferior quality and situated at the greatest distance from the anicut.

14. PROPOSAL TO SETTLE CERTAIN VILLAGES IN OTTAPIDARUM TALUQ WHICH WILL BE BENEFITED BY THE ANICUT.—It was originally intended to incorporate at the settlement the villages (Zamin and Ayen) in the Ottapidarum Taluq, which will be effected by the North Main Channel, with the Tenkarai Taluq, but this idea was abandoned as the latter taluq, already exceptionally

large and unwieldy, would, with the contemplated addition, be altogether beyond the efficient control of one Tahsildar and a single taluk establishment.

These villages however, which extend as far as Tuticorin, were included in Mr. Puckle's

Vide paragraph 6 (23) (24) (25) of his report in Proceedings of Government, 2nd August 1872, No. 1,153. scheme* for the settlement of Tenkarai Taluk, and it was my intention, had I remained in the district, to recommend that the Special

Assistant should, on the completion of the Diglott registers and descriptive memoirs of Tenkarai, which are now under preparation, be deputed to take in hand these villages in view to settlement, and to arrange with the Zemindars, whose lands can be irrigated from the anicut, for the supply of water and payment of water-tax, in order that the project might be made as remunerative as possible, and with least possible delay. Until this is done, we shall not be able to determine the total additional revenue to be derived from the project.

15. INCREASE UNDER THE NORTH MAIN CHANNEL.—From the North Main Channel Mr. Puckle expected a gain of about 12,000 Rupees up to the limits of Tenkarai Taluk proper.

There was to be a gain of about Rupees 2,000 by a channel to be taken to Tirupulyankudi and Parakravadi from the North Main Channel, but such a channel has been found to be impracticable, nor would the increase of Rupees 1,400 expected from the village of Valavakan be realized at present, as a large portion of that village has been rendered unfit for wet cultivation owing to its having been covered by silt from the river. Instead therefore of Rupees 12,000, we have realized by settlement an increase of Rupees 8,580 on the Nunjah lands, which, deducting the items above referred to, is about the amount expected.

A further increase may be expected from the villages under this channel within the limits of the taluk, but the extent of waste land, unlike that in the village under the South Main Channel, is but small, and the ryots were so discouraged by the late failure of crop as to be unwilling to purchase waste land and bring it under cultivation.

There is a greater possibility of an increase to be derived from the lands lying in the villages of Ottapidaram Taluk which will benefit by the anicut.

16. IMPROVEMENTS PROPOSED.—Owing to the want of special funds, resulting from the unwillingness of the ryots to subscribe or to purchase waste lands, and to pressure of time (the Acting Director of Revenue Settlement having urged the necessity of completing the settlement of the taluk, if possible, within the close of the Fasli 1284), it has not been found possible to carry out on the north side works of improvement during the progress of the settlement similar to those executed on the south side; but I took the opportunity when in the taluk of inspecting the tract in company with the Assistant Engineer, and of noting such works of improvement as appeared to be most required; among them are the improvement and repair of the Pekulam of Iruvappapuram with irrigating channels, the raising of the Arumugamangalam tank bund, the extension of the old Palayakayal tank bund, a separate channel from the North Main Channel for Mangalakuruchi, one for Valavallan and other minor works desired by the villagers, with the details of which the Special Assistant is fully acquainted. The larger of these works are of a kind to be carried out from Imperial funds, but there is no reason why a grant from the Budget for agricultural works should not be supplemented by special funds raised by the sale of waste lands when the ryots are encouraged by the advent of a more favorable season to purchase them.

17. DECREASE UNDER THE MARADUR ANICUT.—The decrease (Rupees 16,437) of revenue by settlement under the Maradur Milkal and Kilkal is inevitable, being chiefly due to the high rates of assessment hitherto prevailing (in the best lands) which were largely in excess of the highest settlement rates which could be imposed on lands in this (the 2nd group), viz., Rupees 17-8-0 per acre consolidated for two crops.

AVERAGES.—With all this reduction the average rate arrived at by settlement is still high, being Rupees 12-4-3 and Rupees 6-7-8 per acre in the 2nd and 3rd groups respectively, or Rupees 11-11-1 on the whole under the Maradur Milkal and Rupees 14-1-2 and Rupees 8-14-8 per acre in the 2nd and 3rd groups respectively, or Rupees 13-15-0 on the whole under the Maradur Kilkal.

The average per acre in all the 2nd group villages under both the Maradur and Streeviguuntam Anicuts is Rupees 12-1-6 and in those of the 3rd group Rupees 6-14-1, the total average per acre of the whole river-irrigated tract being Rupees 11-14-7.

This is higher than the average obtaining in the 2nd group villages in the Tinnevelly Taluk, and is owing to the large area of the usual two-crop lands under the Maradur Anicut, and to the large extent to which compounding has taken place in the higher tarams under both anicuts. It must also be remembered that these villages receive water-supply from the Chittar in addition to the flood water of the Tamrapurni passing over the upper anicuts. In the Tinnevelly Taluk, the average assessment in the 1st group villages is considerably higher, and of the villages under the Maradur Anicut cannot fairly be classed in the 1st group; they are probably superior to the ordinary run of 2nd group villages.

18. AVERAGES COMPARED.—The average of the Kilkal is higher than that of the Milkal tract, as the latter contains lands of an inferior quality distant from the head of irrigation, mostly yielding but one crop hitherto, but newly compounded at settlement at comparatively favorable rates. The villages under the Kilkal, on the other hand, are on the whole better situated as to irrigation, contain larger tanks in the eastern part of the tract as well as larger extent of original two-crop land.

19. SECOND CROP ON RIVER-IRRIGATED LANDS.—Compounding for a second crop has taken place to a great extent, the second crop charge having been consolidated on no less than 29,211 out of the whole river-irrigated land in the ryots holdings, viz., 31,335 acres. The composition has been made at different rates, viz., $\frac{2}{3}$, $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ according to the table.

20. RAIN-FED TANKS.—The following tables show the classification of lands irrigated by rain-fed tanks and their assessment. The second crop charge has been compounded for at one-fourth of the first crop assessment on 817 out of 6,616 acres. The assessment of lands under the rain-fed tanks in Fasli 1283 was Rupees 36,421, by settlement it is Rupees 31,134, showing a net decrease of Rupees 5,287. The average assessment per acre as per Jamabandi of Fasli 1283 was Rupees 6-1-11, by settlement it has been reduced to Rupees 4-11-3. This reduction was necessary owing to the abnormally high rates obtaining under some of the rain-fed tanks.

CLASSIFICATION.			ASSESSMENT.						
Class.	Sort.	Area in Acres.	Rate per Acre.		Area in Acres.	Assessment.			Average Rate per Acre.
			For 1st Group.	For 2nd Group.		1st Group.	2nd Group.	Total.	
4	3	122	Rs. A. P. 6 0 0	Rs. A. P. 1 8 0	253	Rs. 1,518	Rs. 383	Rs. 1,901	Rs. A. P.
4	4	614	6 0 0	... ...	1,305	7,829	...	7,829	
4	5	189	4 8 0	1 2 0	364	1,638	411	2,049	
5	4	10	4 8 0	... ...	8,027	13,619	...	13,619	
7	1	78	3 8 0	0 14 0	180	630	162	729	
7	2	1,823	3 8 0	... ...	1,041	3,641	...	3,641	
7	3	2,181	3 0 0	0 12 0	20	60	15	75	
7	4	1,292	3 0 0	... ...	327	981	...	981	
7	5	314	2 8 0	... ...	99	247	...	247	
8	1	37	—	—					
8	2	144	—	—					
8	3	99	—	—					
8	4	198	—	—					
8	5	135	—	—					
		6,616			6,616	80,163	971	81,134	4 11 3

21. OOZE-SPRINGS.—The following tables exhibit the classification and assessment of lands supplied by ooze-springs:—

CLASSIFI- CATION.			RATE PER ACRE.		Area in Acres.	ASSESSMENT.			Average Rate per Acre.
Class.	Sort.	Area in Acres.	For 1st Group.	For 2nd Group.		1st Group.	2nd Group.	Total.	
7	1	109	Rs. A. P. 7 8 0	Rs. A. P. 2 8 0	95	Rs. 713	Rs. 232	Rs. 945	Rs. A. P.
7	2	14	6 0 0	1 8 0	406	2,436	612	3,048	
7	3	42	6 0 0	... ...	64	385	...	385	
8	1	95	4 8 0	1 2 0	14	63	15	78	
8	2	361	3 8 0	0 14 0	42	147	87	184	
		621			621	3,744	896	464	7 7 7

The second crop charge has been consolidated on 557 out of 621 acres. The assessment of the lands irrigated by ooze-springs for Fasli 1283 was Rupees 5,535, by settlement it is Rupees 4,640, showing a net decrease of Rupees 895. The average assessment as per Jamabandi of Fasli 1283 was Rupees 9-11-11 per acre, by settlement it has been reduced to Rupees 7-7-7 per acre.

22. LANDS SUPPLIED BY BALING.—High level lands supplied by baling from channels, tanks, or rivers have been assessed at half the rate assigned to the block in which they are situated.

The area thus irrigated is 4,120 acres assessed at Rupees 16,938. The assessment in Fasli 1283 was Rupees 19,999. There is thus a falling of by settlement of Rupees 3,061. The average assessment of Fasli 1283 was Rupees 5-5-10, by settlement it is Rupees 4-1-9 per acre.

23. BY WELLS.—The following table shows the area and assessment of lands supplied by Government wells or garden lands :—

CLASSIFI- TION.		Rate per Acre.	Area in Acres.	Assess- ment in Rupees.	Average Rate per Acre.
Class.	Sort.				
2	1	RS. A. P. 5 0 0	138	691	
2	2	3 8 0	376	1,315	
2	3	2 8 0	1,100	2,753	
			1,614	4,759	

The assessment of these lands in Fasli 1283 was Rupees 5,312, by settlement it is Rs. 4,759, showing a net decrease of Rupees 553.

24. ORDINARY DRY LANDS.—The following table shows the classification and assessment of ordinary dry lands :—

CLASSIFI- TION.		Area in Acres.	CLASSIFI- CATION.	Area in Acres.	Assess- ment in Rupees.	Average Rate per Acre.
Class.	Sort.					
4	1	256	RS. A. P. 2 8 0	256	640	RS. A. P.
4	2	5,958	1 8 0	6,193	9,290	
4	3	10,175	1 0 0	11,886	11,907	
4	4	2,257	0 12 0	6,574	4,934	
4	5	6,302	0 8 0	12,577	6,295	
5	1	30	0 6 0	23,064	8,676	
5	2	292	0 4 0	77,756	19,507	
5	3	453	0 3 0	35,003	6,612	
7	4	402				
7	1	235				
7	2	1,277				
7	3	1,253				
7	4	880				
7	5	359				
8	1	404				
8	2	2,772				
8	3	4,942				
8	4	22,303				
8	5	77,756				
8	6	35,003				
		173,309		173,309	67,861	0 5 3

25. INCREASE ON DRY LANDS.—Ordinary dry lands interspersed with the irrigated lands have been generally assessed at dry rates according to the class and sort assigned to the block in which they are situated. The other dry lands have been assessed at reasonable rates according to the nature of the soil and its productive power. The total assessment of the ordinary dry lands in Fasli 1283, deducting fixed remissions, was Rupees 57,215, by settlement it is Rupees 67,861, showing a net increase of Rupees 10,646. This increase is accounted for by the exceedingly low rate of assessment formerly obtaining in the large part of the taluq, which in some cases has become doubled by the application of even the lowest rate of assessment for dry lands provided in the settlement table.

26. The following table exhibits in one view the assessment of the whole area settled :—

IRRIGATED.				DRY (INCLUDING GARDEN LAND).			
Rate.	Area.	Assessment.	Average Rate per Acre.	Rate.	Area.	Assessment.	Average Rate per Acre.
RS. A. 17 8	ACRES. 4,716	RS. 82,528	RS. A. P.	RS. A. 5 0	ACRES. 138	RS. 691	RS. A. P.
15 12	3,171	49,957		3 8	376	1,315	
13 8	8,451	1,14,078		2 8	1,356	3,393	
10 0	8,076	80,766		1 8	6,193	9,290	
9 0	118	1,062		1 0	11,886	11,907	
7 8	4,820	36,156		0 12	6,574	4,934	
6 0	1,924	11,544		0 8	12,577	6,295	
5 10	1,722	9,694		0 6	23,064	8,676	
4 8	3,819	17,181		0 4	77,756	19,507	
4 6	253	1,111		0 3	35,003	6,612	
3 12	20	75					
3 8	1,041	3,641					
3 0	342	1,027					
2 8	99	247					
Total...	38,572	4,09,067	10 9 8				
Baling...	4,120	16,938	4 1 9				
Grand Total	42,692	4,26,005	9 15 7				

27. PALMYRAS.—The total number of palmyras counted in this taluq is 7,194,362, consisting of 3,077,003 large and 4,117,359 small trees; 2,340,853 have been assessed at the consolidated rates together with the land assessment. These consist of 1,274,403 large and 1,066,450 small trees. The cess has not been consolidated on 4,853,509 palmyras; out of these the settlement palmyra rates have been imposed on 1,802,600 large trees, and the remaining 3,050,909 small trees have yet to be assessed. The consolidated palmyra cess amounts to Rupees 50,849, and the assessment imposed at the revised rates on trees, the cess of which has not been consolidated, is Rupees 28,358, showing a total of Rupees 79,207. The amount of tax formerly levied on palmyra was Rupees 70,347. There is therefore an increase under this head by settlement of Rupees 8,860.

28. COMPARATIVE STATEMENT.—The accompanying comparative statement shows the area and assessment of the irrigated and dry lands in the different tracts forming the whole taluq according to the Jummabundy of Fasli 1283 and the Settlement now introduced.

Group	Tracts of Country.	As per JUMMABUNDY OF FASLI 1283.		As per SETTLEMENT.		Differences.	PERCENTAGE.	AVERAGE PER ACRE.	
		Area in Acres.	Assessment in Rupees.	Area in Acres.	Assessment in Rupees.			Rs. A. P.	Rs. A. P.
		As per Jummabundy Settlement.	As per Rupees.	As per Jummabundy Settlement.	As per Rupees.			As per Jummabundy Settlement.	As per Rupees.
2	<i>Agapatta.</i>								
	Maradur Milkal ...	7,900	1,08,783	8,243	1,01,124	+ 343	- 7,659	... ..	13 12 4 3
	Do. Kilkal ...	6,349	1,00,400	6,559	92,360	+ 210	- 8,100	... ..	15 13 0 2
	South Main Channel ...	9,077	78,309	9,860	1,07,272	+ 783	+ 28,963	... ..	8 10 0 1
	North do. ...	5,099	56,540	5,986	65,120	+ 487	+ 8,580	... ..	11 1 5 11 10 6
	Total ...	28,425	3,44,032	30,243	3,65,816	+ 1,823	+ 21,784	6	12 1 8 12 1 6
3	<i>Maradur Milkal ...</i>	838	6,626	908	5,881	+ 70	- 745	... ..	7 14 6 6 7 8
	Do. Kilkal ...	163	1,529	179	1,596	+ 16	+ 67	... ..	9 6 1 8 14 8
	Total ...	1,001	8,155	1,087	7,477	+ 86	- 678	9	8 2 4 6 14 1
	<i>Agapatta Total ...</i>	29,426	3,52,187	31,335	3,73,293	+ 1,909	+ 21,106	6	11 15 6 11 14 7
	<i>Ponnekulum.</i>								
	Maradur Milkal ...	673	3,963	712	3,150	+ 39	- 813	... ..	5 14 3 4 6 9
	Do. Kilkal ...	738	4,274	806	3,511	+ 68	- 763	... ..	5 12 8 4 5 8
	Dry Villages on the south ...	3,172	21,243	3,579	17,775	+ 407	- 3,468	... ..	6 11 2 4 15 6
	Do. do. ...	1,126	5,487	1,220	5,194	+ 94	- 293	... ..	4 14 0 4 4 1
	Palmyra Forest ...	241	1,454	299	1,504	+ 58	- 50	... ..	6 0 6 5 0 6
	Total ...	15,950	36,421	6,616	31,134	+ 666	- 5,287	11	15 6 1 11 4 11 3
	<i>Ooze-spring.</i>								
	South Main Channel ...	415	4,100	456	3,560	+ 41	- 540	... ..	9 14 1 7 12 11
	Palmyra Forest ...	153	1,435	165	1,080	+ 12	- 355	... ..	9 6 1 6 8 9
	Total ...	568	5,535	621	4,640	+ 53	- 895	9	16 9 11 11 7 7 7
	<i>Grand Total ...</i>	35,944	3,94,143	38,572	4,09,067	+ 2,628	+ 14,924	7	10 15 5 10 9 8

Category	Tracts of Country.	As per JUMMABUNDY of FASLI 1283.		As per SETTLEMENT.		Difference.	Percentage.	AVERAGE PER ACRE.
		Area in Acres.	Assessment in Rupees.	Area in Acres.	Assessment in Rupees.			
<i>Baking.</i>								
...	Maradur Milkal ...	140	593	157	695	+ 17	+ 102	... 4 3 9 4 6 10
	Do. Kilkal ...	240	1,302	253	1,349	+ 13	+ 47	... 5 6 10 5 5 4
	South Main Channel ...	811	3,028	906	3,838	+ 95	+ 810	... 3 11 9 4 3 9
North do.	493	2,376	528	2,619	+ 35	+ 243	... 4 13 1 4 15 4	
Dry Villages on the south ...	710	4,562	813	3,368	+ 103	- 1,194	... 6 6 10 4 2 3	
Palmyra, Forest ...	1,335	8,138	1,463	5,069	+ 128	- 3,069	... 6 1 6 3 7 5	
Total ...	3,729	19,999	4,120	16,938	+ 391	- 3,061	10 15 5 5 10 4 1 9	
Total Nunjah ...	39,673	4,14,142	42,692	4,26,005	+ 3,019	+ 11,863	8 3 10 7 0 9 15 8	
<i>Garden.</i>								
...	Maradur Milkal ...	29	38	35	99	+ 6	+ 61	... 1 5 0 2 13 3
	Do. Kilkal ...	47	94	52	152	+ 5	+ 58	... 2 0 0 2 14 9
	South Main Channel ...	298	357	306	968	+ 8	+ 611	... 1 3 2 3 2 7
North do.	190	354	210	525	+ 20	+ 171	... 1 3 10 2 8 0	
Dry Villages on the south ...	127	294	150	373	+ 23	+ 79	... 2 5 0 2 7 9	
Do. north ...	30	85	36	94	+ 6	+ 9	... 2 13 4 2 9 9	
Palmyra Forest ...	782	4,090	825	2,548	+ 43	- 1,542	... 5 3 8 3 1 5	
Total ...	1,503	5,312	1,614	4,759	+ 111	- 553	7 10 3 8 7 2 16 2	
<i>Dry.</i>								
...	Maradur Milkal ...	8,929	3,559	9,602	3,314	+ 673	- 245	... 0 6 5 0 5 6
	Do. Kilkal ...	10,781	5,626	12,330	5,575	+ 1,549	- 51	... 0 8 4 0 7 3
	South Main Channel ...	22,143	6,965	22,966	11,907	+ 863	+ 4,942	... 0 5 5 0 8 4

Tract of Country.	As per JUMMABUNDY of FASLI 1283.		As per Settlement.		Difference.		Percentage.	Average per Acre.		
	Area in Acres.	Assessment in Rupees.	Area in Acres.	Assessment in Rupees.	Acres.	Rupees.		Rupees.	Acres.	
... North Main Channel ...	10,163	6,411	11,112	6,255	949	— 156	...	0 10 1	0 9 0	
... Dry Villages on the south ...	41,703	11,173	45,003	12,638	+ 3,300	+ 1,465	...	0 4 3	0 4 6	
Do. north ...	25,794	18,128	26,404	18,398	+ 610	+ 270	...	0 11 3	0 11 2	
Palmyra Forest ...	49,975	7,813	45,892	9,774	+ 4,083	+ 1,961	...	0 2 6	0 3 5	
Total ...	169,488	59,675	178,309	67,861	+ 3,821	+ 8,186	2	14 0 5 8	0 6 3	
Dry and Garden Total ...	170,991	64,987	174,923	72,620	+ 3,932	+ 7,633	2	12 0 6 1	0 6 8	
<i>Grand Total</i>										
... Maradur Milkal ...	18,509	1,23,562	19,657	1,14,263	+ 1,148	— 9,299	...	...	...
Do. Kilkal ...	18,318	1,13,225	20,179	1,04,483	+ 1,861	— 8,742	...	...	...
South Main Channel ...	32,744	92,759	34,494	1,27,545	+ 1,750	+ 34,786	...	...	...
North do.	15,945	65,681	17,436	74,519	+ 1,491	+ 8,838	...	...	...
Dry Villages in the south ...	45,712	37,272	49,545	34,154	+ 3,833	— 3,118	...	...	...
Do. north ...	26,950	23,700	27,660	23,686	+ 710	— 14	...	...	...
Palmyra Forest ...	52,486	22,930	48,644	19,975	+ 3,842	— 2,955	...	...	...
Total ...	210,664	47,9129	217,215	4,98,625		+ 6,951	+ 19,496	3 4	...	
<i>Deduct fixed remissions, Chaturbhogam, g.c.</i>										
... Chaturbhogam ...	...	2,460	...	...				
... Deepatsmaniem ...	...	1,498	...	...				
Total ...	....	3,958	....	....			...	...	...
Remainder ...	....	4,75,171	....	4,98,625	....	+ 23,454	...	5 .....	...

The above statement fully exhibits the results of the settlements in each tract showing the increase or decrease over or below the assessment according to the former rates under each of the heads of river-irrigated lands, lands irrigated by rain-fed tanks and by ooze-springs, lands supplied by baling from Government sources of irrigation, and garden lands, and ordinary dry lands. It shows a decrease by settlement in the total revenue derived from the Maradur anicut and in the average per acre in the area cultivated an increase both in the area cultivated in the revenue and average under the Streeviguntam anicut resulting in a net increase of 1,909 acres and Rs. 21,106 under both anicuts with an average slightly below that formerly obtaining a decrease of revenue from irrigated lands in the "Ponnekulam and Teri" tracts with a considerable reduction in the average per acre, a decrease of revenue from lands supplied by baling and from garden lands, and finally an increase in the revenue from dry lands.

These differences have been already explained under the several heads in this memorandum.

29. FINANCIAL RESULTS.—On the whole, after deducting fixed remissions, which, with the

introduction of the settlement, have ceased to

	RS.
Fasli 1283—Land Revenue (deducting fixed remission)	4,75,171
Fasli 1284—By settlement	4,98,625
Increase by settlement	23,454
Fasli 1283—Palmyra Cess	70,347
Fasli 1284—Do do	79,207
Increase by settlement	8,860
Total Increase	32,314

exist, the financial result* shows an increase by

settlement of Rupees 23,454 under the head of

Land Revenue, which, with the increase of Rs.

8,860 under the head of Palmyra Cess, make a

total increase by settlement of Rupees 32,314.

The increase under Land Revenue is chiefly due to the Streeviguntam anicut, without which there would probably have been a loss of about Rupees 30,000 in the tracts non-irrigated by its channels.

30. THE SPECIAL ASSISTANT FOR SETTLEMENT.—The services of the Special Assistant T. Venkatachariar in connection with this work have already received the special recognition from Government, but I desire here to place on record my appreciation of the energy and ability he has brought to bear on the conduct of the settlement of this difficult taluq, and the careful and conscientious manner in which he has performed the duty entrusted to him.

(True Copy.)

GULF OF ADEN,
25th October 1875.

(Signed) A. T. ARUNDEL,

Additional Sub-Collector.

(True Copy.)

(Signed) C. RUNDALL,

Ag. Director of Rev. Sett.

IN his letter, dated 14th April 1875, No. 724-71, Mr. Puckle, Acting Director of Revenue Settlement, submitted a report on G. O., 19th July 1875, No. 1,085. the settlement of the villages under the Streeviguntam Anicut on the south bank of the Tainbrapurni river in the Tenkarai Taluq of the Tinnevelly District in anticipation of the report for the whole taluq, his object being to furnish Government with early information as to the returns which might be expected from the Streeviguntam Anicut recently constructed from Loan Funds at a cost of ten lakhs of Rupees. In reviewing the Board's Proceedings transmitting the Director's report, the Government remarked with satisfaction that the actual result of this portion of the work showed a return on the outlay of 9 per cent., and that but for the anicut it would probably have been necessary to make a considerable reduction in the settlement of these lands, the former rates having been abundantly high with reference to the quality of irrigation available.

2. In his letter quoted at the head of these Proceedings, Mr. Rundall, who acted as Director during the absence on furlough of Mr. Puckle, reports the result of the introduction of the revised settlement throughout the taluq, and, although he brings to notice that the result of the final settlement of the villages affected by the southern

main channel has reduced the anticipated return on the outlay from 9 to 5 per cent. for that portion of the project, he records his opinion that, had it not been for the aid given to cultivation by the anicut, the result of the settlement would have been a reduction for the whole taluq on the previous demand to the extent of some Rupees 30,000 instead of a net increase of Rupees 23,454. The tabular statement appended to paragraph 3 shows the increase to be only Rupees 19,496, but to this has, as explained in paragraph 4, to be added Rupees 3,958, the fixed remissions under the old demand.

3. It will be observed that, with the exception of the tract irrigated by the Streeviguntam Anicut, it has been found necessary to reduce the assessment on all lands irrigated under other sources, and then to such an extent as to make the settlement demand considerably lower than the old demand, notwithstanding the excess area brought to account by survey, but, as before stated, this falling off has been more than compensated by the enhanced receipts under the Streeviguntam work. It will be seen from paragraph 15 of Mr. Comyn's memorandum that the present revenue under the north main channel within the limits of the Tenkarai taluq falls short of Mr. Puckle's estimate by some Rupees 3,000 odd. The causes for this are fully explained, and as a set-off it is expected that as the irrigation is extended, certain villages in Oottapidaram Taluq will benefit. The Board concur with the opinion expressed by Mr. Rundall in paragraph 9 of his letter that these villages should be dealt with as early as practicable, and this will doubtless have Mr. Puckle's attention.

4. In paragraph 10 Mr. Rundall brings to notice that the comparison instituted by Mr. Comyn is between the revenue details of Fasli 1283 and the settlement results of Fasli 1284, and that consequently the comparison is not on identical areas, as the occupied extent, of course, varies every year. Mr. Rundall, therefore, submits a tabular statement (*vide* paragraph 11) in which the old and revised demands on the occupation of Fasli 1284 are compared, the result being a net increase for the taluq of Rupees 15,851, or Rupees 7,603 less than the sum shown by Mr. Comyn. This at first sight would seem to place matters in a less favorable aspect, but, as explained in paragraphs 12, 13, and 14 of Mr. Rundall's letter, the extension of the occupied area and the enhancement of assessment by the transfer from dry to wet in 1284 are due mainly to the favorable rates of the revised settlement and the facilities for irrigation afforded by the Streeviguntam project. Apart from the influence of these two causes, it is probable that the revenue demand (as distinguished from that under settlement rates) of 1284 would have varied but little from that of 1283; assuming therefore that the additional revenue derived in Fasli 1284 from lands taken on durkhast and from the conversion of dry to wet, amounting to Rupees 7,603, would not, under other circumstances, have been brought to account, Mr. Comyn's estimate of the increase of Revenue is correct. With reference to the concluding paragraph of Mr. Rundall's letter, however, such arrangements should, in future be made, as will admit of a comparison of the revenue and settlement results, and the Director is requested to issue orders accordingly.

5. The rates for irrigated lands range from Rupees 2-8-0 to Rupees 17-8-0, and for dry including gardens from 3 Annas to Rupees 5 per acre. Twenty per cent. of the wet area is rated at Rupees 13-8-0, 19 per cent. at Rupees 10, 11 per cent. at Rupees 7-8-0, and the same extent at Rupees 17-8-0; these are of course double crop rates. Of the dry area, 84 per cent. is rated at or below 8 Annas. The average rate on wet lands in the whole river-irrigated tract is Rupees 11-14-7, which is higher

than the average obtaining in the second group villages in the Tinnevelly Taluq. This is explained to be owing to the large area of usual two crop land under the Maradur Anicut and to the large extent to which compounding for second crop has taken place in the higher tarams. Out of 31,335 acres, the entire occupied extent, the second crop charge was consolidated on no less than 29,211 acres at two-thirds, half, one-third, and one-fourth according to the table. In compounding this rate the same principles were followed as in the settlement of the Tenkasi and Tinnevelly taluqs except that the rate adopted for the second crop charge on nunjah lands of the highest class in second group villages under the Streeviguntam Anicut is one-half instead of two-thirds on the same class of the same group under the upper anicuts. The reason for this is, that the Streeviguntam work being the last of the series does not furnish the same advantages of irrigation as do the upper anicuts during the "Kar" or second crop season.

6. The amalgamation of the villages and rectification of their boundaries appear to have been carried out with discretion and with the almost unanimous assent of the people. Under settlement 197 villages have been reduced to 133, so that clubbing has not been carried out to nearly the extent remarked on in G.O., dated 5th March 1875, No. 360, in the case of the Tinnevelly and Tenkasi Taluqs. As directed in the order just quoted the proposals for clubbing were submitted to the Board, and approved in their Proceedings, dated 22nd November 1875, Miscellaneous No. 10,460.

7. With the foregoing remarks, the Board submit the results of the settlement of the Tenkarai Taluq for the consideration and orders of Government.

(True Copies and Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

To the Secretary to Government, Revenue Department.
" the Director of Revenue Settlement.
" the Collector of Tinnevelly.

Exd. W. J. Lewis.
Exd. A. Grubert,

B O A R D O F R E V E N U E

MADRAS.

1876.

PROCEEDINGS, 25TH SEPTEMBER 1876, NO. 2,4;

Entered

Received

SEPTEMBER.

No. 2,422.

Settlement—of Tenkarai Taluq in Tinnevelly
District.—Submitting to Government report
Acting Director of Revenue Settlement
results of —.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 16th October 1877.

Read the following letter from R. K. PUCKLE, Esq., Director of Revenue Settlement, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Tinnevelly, 20th September 1877, No. 2,090-43 :—

I HAVE the honor to forward herewith the report of Special Assistant Vencata Charriar on the settlement of the Nanguneri Taluq of the Tinnevelly District.

2. A portion of this taluq, consisting of eighty-one villages, was included in my settlement scheme for the river valley, and for this a reduction of Rupees 38,491 of assessment was sanctioned in G.O., No. 1,289, dated 6th September 1872. Another portion, consisting of fourteen villages, was included in my settlement scheme for the palmyra forest, and for this a reduction of Rupees 1,622 of assessment was sanctioned in G.O., No. 594, dated 12th May 1874, and in G.O., No. 668, dated 15th February 1877, sanction was accorded for my treatment of the remaining 118 villages without any previous scheme, on the understanding that the reduction of assessment should be about Rupees 50,000, and these three items amount to a sanctioned reduction of Rupees 89,508 for the entire taluq. The results as now reported show that the actual reduction by settlement is in all Rupees 75,215, viz., Rupees 18,872 in the river valley, Rupees 2,093 in the palmyra forest, and Rupees 54,250 in the remaining villages, or Rupees 14,293 under the estimate. The reasons for making this large reduction have been set forth at length in the enclosures of the orders noted above, and when it is borne in mind that much land that was never irrigated was formerly assessed at wet rates, that lands were classed as double crop which never got second crop water, and that the poor sandy soil under rain-fed tanks was assessed higher than good land in the river valley, it is clear that the redress of these grievances must occasion a loss of revenue, more nominal than real however, as the annual occasional remissions of the last ten years have averaged Rupees 53,688 which leaves but Rupees 21,527 to be truly debited to the settlement.

3. The area operated on includes 22,329 acres irrigated by rivers, 6,431 acres irrigated by rain-fed tanks, 293 acres irrigated by baling, and 210,617 acres of dry land. For the first the settlement average is Rupees 7-2-5 against Rupees 9-8-2 per acre formerly, for the second Rupees 5-5-5 against Rupees 8-3-3, for the third Rupees 2-12-2 against Rupees 3-15-3, and for the last Annas 4-11 against Annas 6-5 per acre formerly. Only 4,767 acres of double crop land were compounded for, as the irrigation is very uncertain and the hill streams benefit more by the south-west than by the north-east monsoon.

4. This taluq comprises 566 square miles, and the settlement which was very difficult was got through by Vencata Charriar in the course of six months, or within the average period allowed for the settlement of a taluq under my system; twenty-four of the enormous villages for which this taluq was famous were divided into two or more each with the consent of the villagers, 24,750 acres and 216,693 palmyras held in common in forty-four villages were divided among 1,710 shareholders, 4,850 puttus were transferred, and the charge on 1,837,000 palmyras was consolidated with the land assessment on a large number of fields; if to this the inspection of lands, the rectification of anomalous registry, the transfer of dry to wet and wet to dry, the counting of trees, the treatment of second crop and the hearing and redress of complaints at the Settlement Jamabandi be added, some idea may be formed of the excessive labor involved in settling such a taluq as this.

5. The 208 villages formerly comprised in this taluq have become 213 by the sub-division of 24 villages and by the merging of 20 uninhabited and 12 petty villages in those in which the ryots resided.

6. According to the Revenue accounts there were 1,837,000 palmyras in this taluq ; these yielded a revenue of Rupees 24,715 at many rates, varying from 2 Annas to $2\frac{1}{2}$ Pies per tree. The assessment of nine lakhs of these growing onputta lands has now been consolidated together with the $\frac{1}{2}$ Pie assessment of nearly a million of seedlings, together amounting to Rupees 19,668, and there yet remain 427,214 palmyras standing on waste or on the lands of Puttadars who have no claim to the trees which are now divided into three classes, assessed at 12, 6, and 3 Pies per tree, and yield a revenue of Rupees 14,482. These as well as the seedlings around them as they come to maturity will have to be counted triennially as formerly, but the bulk of this labor has now been saved to the Curnams, as the fields on which tree-tax is compounded are recorded in the registers, and it is only those that have no entry against them that will need inspection in future.

7. A considerable area hitherto held on putta, though unfit for cultivation, has been resigned as pasture ground for the cattle, and to this some waste has been added, making in all 6,240 acres in 39 villages, besides certain slopes of the hills which were indicated but not marked out by the villagers.

8. The Dupati Manyam and Stalam Kaval deductions from assessment in favor of Monegars and Kavalgars, amounting to Rupees 2,711, have been brought to account and credited to the Service Cess Fund, and the Chaturbagam and Vararayayat deductions in favor of certain privileged classes, amounting to Rupees 7,502, have now ceased to exist.

9. The village establishments of this taluq are now being revised on the principles laid down by Government in Proceedings, No. 874, dated 1st March 1877.

ENCLOSURE No. 1.

From T. VENCATA CHARRIAR, Special Assistant to Collector in charge of the Additional Sub-Collector's Office, Tinnevelly, to R. K. PUCKLE, Esq., Director of Revenue Settlement, dated Kovilpatti, 11th September 1877, No. 193.

I HAVE the honor to submit a report of the financial result of the settlement of the Nanguneri Taluq.

2. *Number of Villages and Area in Square Miles.*—This taluq contains 213 villages as per settlement, consisting of 362,153 acres or 566 square miles.

3. *Irrigation.*—It is irrigated by the Karumbandiyammankal and Pachaiyar which are the affluents of the Tamrapurni river, and by Nambiyur and Anumanadi rivers which flow direct into the sea. Of the 213 villages, 43 are irrigated by the Karumbandiyammankal channel, 37 by the Pachaiyar, 33 by the Nambiyur, and 11 by the Anumanadi, while 76 contain only rain-fed tanks and 14 are only dry villages.

4. *Grouping of Villages.*—The villages irrigated by the rivers and rain-fed tanks have for settlement purposes been placed in different groups as follow:—

Irrigation.	NUMBER OF VILLAGES.			
	2nd Group.	3rd Group.	4th Group.	Total.
<i>River Irrigated.</i>				
Karumbandiyammankal Channel	31	11	...	42
Pachaiyar	18	19	...	37
Nambiyur	20	13	...	33
Anumanadi	7	4	...	11
Total... ...	76	47	...	123
Rain-fed ... ... ... ...	...	67	9	76
Entire Dry Villages...	76	114	9	199
	...	...	...	14
	...	...	...	213

These rivers irrigate partly direct by the channels led off from anicuts or temporary dams and mostly by tanks fed by them.

5. *Classification of Soils.*—The soil is almost wholly red loam of irrigated lands and principally red sand of dry lands.

Irrigation.	Group.	CLASSIFICATION.		Total Area in Acres.	Dry.		
		Class.	Sort.		Class.	Sort.	Total Area in Acres.
River irrigated..	2nd	7	1	5,057	2	2	200
		7	2	7,297	2	3	2,295
		7	3	3,755			
		7	4	142			
	Total...	..	...	16,251	Total...	...	2,495
	3rd	4	3	121	4	5	5,146
		7	1	833	5	5	249
		7	2	4,163	7	1	702
		7	3	946	7	2	419
		7	4	15	7	3	241
	Total...	...	...	6,078	7	4	1
	Total River Irrigated.	...	...	22,329	8	1	28
Rain-fed.	2nd...	7	3	54	8	2	11
		7	4	279	8	4	31,942
					8	5	152,207
		Total...	...	333	8	6	17,176
	3rd...	4	5	19	Total...	...	208,122
		7	2	3,386			
		7	3	1,538	Total Dry...	...	210,617
		7	4	140			
		7	5	30			
	Total ..	...	...	5,616			
	4th...	7	1	81			
		7	2	59			
		7	3	277			
		8	5	65			
	Total...	...	...	482			
	Total Rain-fed...	...	...	6,431			
	Total Irrigated...	...	...	28,760			
	Baling...	...	...	293			
	Total Wet...	...	...	29,053			

6. The assessment on the different tracts are shown under each money-rate now imposed in juxtaposition with the assessment that hitherto existed. The average rates of assessment for wet and dry are also exhibited against different items with the result of settlement.

Irrigation.	As per Settlement.												As per JAMABANDI.							
	Rate per Acre.			Survey Area in Acres.			Assessment.			Old Area in Acres.			Assessment.			Average.				
	1st Crop.	2nd Crop.	Total.	1st Crop.	2nd Crop.	Total.	Rs. A. P.	Rs. A. P.	Rs. A. P.	1st Crop.	2nd Crop.	Total.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Extent.	Difference.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
River irrigated.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
9 0 0	4 8 0	18 8 0	2,326	20,932	10,465	31,897	21,750	17,189	38,889	11 9 1	11 10 4	4,170	33,294	11 10 4	11 10 4	11 10 4	11 10 4			
9 0 0	9 0 0	9 0 0	2,781	24,574	24,574	50,124	2,601	29,124	3,599	9 7 5	9 7 5	11,188	9 7 5	9 7 5	9 7 5	9 7 5	9 7 5			
7 8 0	2 8 0	10 0 0	7,526	2,508	10,084	10,084	802	7,589	6,321	62,668	4,379	66,647	9 13 7	9 13 7	9 13 7	9 13 7	9 13 7	9 13 7		
7 1 0	7 0 0	7 1 0	7,126	63,443	63,443	63,443	63,443	63,443	63,443	5,424	5,424	4,287	2,082	6,469	7 15 11	7 15 11	7 15 11	7 15 11		
6 0 0	1 8 0	7 8 0	7 23	4,339	1,085	43,934	6,543	53,952	8,510	53,952	53,952	53,952	53,952	53,952	53,952	53,952	53,952	53,952		
6 0 0	6 0 0	1 2 0	6 0 0	7,817	48,924	48,924	71	355	51	353	353	120	473	6 14 9	6 14 9	6 14 9	6 14 9	6 14 9	6 14 9	
4 8 0	4 8 0	1 2 0	5 10 0	63	4,612	4,612	892	892	892	6,684	6,684	512	7,196	7 7 11	7 7 11	7 7 11	7 7 11	7 7 11	7 7 11	
4 8 0	4 8 0	1 2 0	4 8 0	4,612	4,612	4,612	51	13	64	14	14	6	1	7	0 6 10	0 6 10	0 6 10	0 6 10	0 6 10	0 6 10
Total ...	...	...	...	22,329	159,685	14,149	1,73,827	7 2 5	19,554	1,86,013	35,512	2,21,525	9 8 2	+ 2,775	- 47,898				
Rain-fed.	6 0 0	1 8 0	7 8 0	806	1,884	468	2,292	272	2,659	1,805	4,364	9 6 6								
	6 0 0	6 0 0	6 0 0	3,715	22,390	...	22,390	3,261	30,279	2,408	32,687	9 4 7								
	4 8 0	1 2 0	5 10 0	30	183	166	166	23	117	69	186	5 1 5								
	4 8 0	4 8 0	4 8 0	1,846	8,300	...	8,300	1,604	11,145	657	11,703	6 15 9								
	3 8 0	3 8 0	0 14 0	4 6 0	1,06	94	465	96	464	247	711	4 13 4								
	3 8 0	3 8 0	0 14 0	4 6 0	380	1,159	1,169	295	1,493	176	1,669	5 1 0								
	3 0 0	0 0 0	0 12 0	3 13 0	6	25	6	31	30	18	48	8 12 0								
	3 0 0	0 0 0	0 12 0	3 13 0	0 0	75	75	75	75	...	55	2 1 10								
	2 0 0	0 0 0	0 8 0	2 8 0	65	129	32	161	125	88	213	2 5 9								
Total ...	...	...	...	6,431	34,326	623	34,949	5 5 5	6,638	46,367	6,363	51,635	8 3 3	+ 793	- 16,686				
Total Irrigated...	...	...	...	28,760	1,94,011	14,765	2,08,776	6 11 11	25,192	2,62,280	40,880	2,73,160	9 3 6	+ 3,563	- 64,384				
Bailing ...	...	...	...	293	809	79	888	2 12 2	251	992	312	1,304	3 15 8	+ 42	- 416				
Total Wet ...	...	...	...	29,053	1,94,820	14,844	2,09,664	6 11 3	25,443	2,33,272	41,193	2,74,464	9 2 7	+ 3,610	- 64,800				

Dry.

Rate per Acre.	As per Settlement.			As per Jamabandi.			Difference.	
	Extent.	Assessment.	Average.	Extent.	Assessment.	Average.	Extent.	Assessment.
Rs. A. P.	ACRES.	RS.	RS. A. P.	ACRES.	RS.	RS. A. P.	ACRES.	RS.
3 8 0	200	701	...	178	937	5 4 3	...	...
2 8 0	2,295	5,741	...	1,972	5,908	2 15 11	...	...
Total ..	2,495	6,442	2 9 4	2,150	6,845	2 9 4	+ 345	- 403
1 8 0	702	1,051	...	690	610	0 14 2	...	...
1 0 0	447	448	...	402	1,925	4 12 7	...	...
0 12 0	252	188	...	200	1,087	5 7 0	...	...
0 11 0	5,147	2,576	...	4,999	2,902	0 9 5	...	...
0 6 0	81,942	11,995	...	29,845	13,635	0 7 4	...	...
0 4 0	152,456	48,249	...	138,972	46,340	0 5 4	...	...
0 3 0	17,176	8,232	...	15,186	3,958	0 4 2	...	...
Total ...	208,122	57,732	0 4 5	190,294	70,457	0 5 11	+ 17,828	- 12,725
Total Dry ...	210,617	64,174	0 4 11	192,444	77,302	0 6 5	+ 18,173	- 13,128
Total Dry & Wet.	239,670	2,73,838	..	217,887	3,51,766	..	+ 21,783	- 77,928

From the above the result will be gathered as follows.

7. *River Irrigated Tract.*—The rates imposed on this tract range from 9 to 3-8-0 Rupees per acre for single crop, and Rupees 13-8-0 to Rupees 4-6-0 for double crop. More than $\frac{1}{6}$ of the total irrigated area of 22,329 acres have been assessed from Rupees 6 and upwards per acre. The assessment as per Jamabandi of Fasli 1285 was Rupees 1,86,013 for single crop with an average rate of Rupees 9-8-2 per acre ; by settlement it is Rupees 1,59,685 with an average rate of Rupees 7-2-5 per acre, exhibiting a loss of Rupees 26,328.

8. *Rain-fed Tank.*—The rates imposed for lands under the rain-fed tanks, range from Rupees 6 to 2 per acre for single crop, and Rupees 7-8-0 to 2-8-0 for double crop. More than $\frac{1}{6}$ of the total area of 6,431 acres have been assessed at Rupees 4-8-0 and upwards per acre. The assessment as per Jamabandi of Fasli 1285 was Rupees 46,267 with the high average rate of Rupees 8-3-3 per acre for single crop, while as per settlement it is Rupees 34,326 with an average rate of Rupees 5-5-5 showing a decrease of Rupees 11,941.

9. *Lands supplied by Baling.*—Baling has in every case been assessed at half the assessment of the block in which it is situated. The assessment as per Jamabandi of Fasli 1285 was Rupees 992 with an average rate of Rupees 3-15-3 ; by settlement it is Rupees 809, averaging at Rupees 2-12-2 per acre, and exhibiting a falling off of Rupees 183.

10. The total wet assessment as per Jamabandi was Rupees 2,33,272 with an average assessment of Rupees 9-2-7 ; by settlement it is Rupees 1,94,820 averaging at Rupees 6-11-3 per acre, and making a total loss of Rupees 38,452 in the single crop wet assessment.

11. *Second-crop Assessment.*—Under the head of the second crop charge, the assessment as per Jamabandi of Fasli 1285 was Rupees 41,192 levied on acres 4,907, viz., Rupees 35,512 on 4,039 acres in the river irrigated, Rupees 5,368 on 768 under the rain-fed tanks, and Rupees 312 on 100 acres in baling. In the settlement the second crop charge has been consolidated on 4,767 acres out of 29,053 acres, viz., 4,130 acres in the river irrigated tract, 515 acres under the rain-fed tanks, and 122 acres under the head of baling. The total second crop charge is Rupees 14,844 resulting in a loss of Rupees 26,348 compared with the previous assessment. In this taluk which contains minor rivers inferior to the Tambrapurni and rain-fed tanks, and where the irrigation is precarious and not generally amply favored with the south-west monsoon, much care has been bestowed in allowing the ryots to compound, limiting it very much to more favored tracts adjoining the hills and places where the picottah baling with aid of wells and springs of a more certain supply of water largely helps the cultivation. All anomalous cases, more especially under the rain-fed tanks, wherein heavy second crop charge was hitherto made nominally in accounts have been got rid off by charging only single crop rates on the lands.

12. *Dry Lands under Government Wells.*—2,495 Acres supplied from Government wells have been rated at Rupees 3-8-0 and 2-8-0 per acre. The assessment as per settlement is Rs. 6,442 exhibiting a falling off of Rupees 403 compared with the previous Jamabandi assessment of Rupees 6,845.

13. *Ordinary Dry Lands.*—The assessment as per Jamabandi of Fasli 1285 was Rupees 70,457 with the average rate of Annas 5-11; by settlement it is Rupees 57,732 averaging at Annas 4-5 per acre, resulting in a decrease of Rupees 12,725. The total dry assessment including garden was, as per Jamabandi, Rupees 77,302 with the average rate of Annas 6-5; by settlement it is Rupees 64,174 averaging at Annas 4-11, and making a total falling off of Rupees 13,128.

14. The total assessment, wet and dry, as per Jamabandi was Rupees 3,51,766; by settlement it is Rupees 2,73,838, resulting in a decrease of Rupees 77,928.

15. *Palmyras.*—The total number of palmyras as per previous accounts was 1,137,253 charged with an assessment of Rupees 24,715; by settlement it is 13,27,597, assessed at Rupees 31,807, besides seedlings numbering 1,252,741, of which 936,892 have been charged with Rupees 2,342, and the remaining 315,849 have yet to be brought to charge, thus making a total of charge on palmyras of Rs. 34,150. The charge on palmyras in the cultivated fields has for a great part been consolidated with the land assessment, viz., Rupees 17,325 on 900,383 out of 1,327,597 big palmyras and Rupees 2,342 on 936,892 out of 1,252,741 seedlings. The marginal table will exhibit in one view the particulars of the palmyras, the assessment on which has been consolidated and of those on which the cess has not been consolidated. The principle followed in the settlement of the palmyras is the

Particulars.	PALMYRAS.				
	No.	Assess- ment.	Seedlings. No.	Assess- ment.	Total Assess- ment.
As per Settlement —					
Consolidated ..	900,383	17,325	936,892	2,343	19,668
Not consolidated ..	427,214	14,482	315,849	..	14,482
Total ..	1,327,597	31,807	1,252,741	2,343	34,150
As per Jamabandi ..	1,137,253	24,715	..	..	24,715
Difference ..	+ 190,344	7,092	1,252,741	2,343	9,435

same as that pursued in Tinnevelly and other taluqs already brought under settlement. The result of settlement on palmyras is an increase of Rupees 9,435 in the assessment.

16. *Pasturage.*—Putta lands to the extent of 5,214 acres, assessed at Rupees 1,307, and waste lands to the extent of 1,026 acres, assessed at Rupees 380, making a total area of 6,240 acres with an assessment of Rupees 1,687, have been set aside for pasturage in 39 villages at the request of the ryots. In the other villages, noputta lands have been specially set aside for pasture lands, as the cattle easily find their pasturage in the dry lands in the plain, in the irrigated fields when the harvest is over, or adjoining waste lands, forest, and hills.

17. *Building Site.*—About 38 acres, assessed at Rupees 37, have been added to the village building sites in 24 villages where there were insufficient.

18. *Division of Common Lands.*—Lands to the extent of 24,750 acres and palmyras to the number of 216,693 held in common have been divided among 1,710 shareholders, and the sharing system in connection with these lands and palmyras has entirely ceased.

19. *Transfer of Puttas.*—Four thousand eight hundred and fifty puttas have been transferred with the consent of the parties concerned, besides a large number of others which were virtually transferred and adjusted in the lists of the division of common lands already noted.

20. To summarize the results of the settlement in the taluq of Nanguneri, the heavy and anomalous rates of assessment on irrigated and dry lands have been got rid off and fairer rates imposed as suited to the circumstances of the country.

21. All anomalous cases in the treatment of Nunjah and Punjab and first and second crop charges have been properly dealt with.

22. The fluctuating charges on palmyras have been compounded for permanently consolidated cess in all possible cases.

23. The common lands were divided in all feasible cases and the numerous sources of confusion among the shareholders were removed.

24. The permanent remissions known locally as Dupati Manyam and Stalam Kaval have been brought to the credit of the general fund for the payment of the village establishment.

25. Lands held on favorable terms by privileged classes (Chaturbagam, &c.) have been brought to full assessment.

26. Pasture lands were provided for wherever they were required.

27. Extension of building sites were arranged for according to the requirements of the ryots.

28. The total final net result of settlement compared with Jamabandi, after deducting the permanent remissions and net loss of revenue by transfer of items from the Jamabandi assessment and adding the increase of Palmyra Revenue, is a decrease of Rupees 53,145 as hereunder particularized :—

	RS.
Total Jamabandi Assessment	3,58,670
Deduct loss of items—	
Transfer to Poramboke, such as village site, &c ...	1,623
Relinquishment	492
Vararayayet...	4,789
	6,904
Remainder ...	3,51,766
Deduct—	
Chaturbagam	2,713
Remainder ...	3,49,053
Deduct also net loss of transfer of items—	
Nunjah to Punjab	5,814
Do. to baling	126
Baling to Punjab	46
Two crop to one crop	15,738
Total loss ...	21,724
Deduct increase—	
Baling to Nunjah	6
Punjab to do.	1,078
Do. to baling	69
One crop to two crop	4,178
Waste brought toputta	3,758
Total ...	9,089
Net loss ...	12,635
Remaining Jamabandi assessment of land revenue ...	3,36,418
Palmyra assessment	24,715
Total ...	3,61,133
As per settlement—	
Land Revenue	2,73,838
Palmyra Cess	34,150
	3,07,988
Net result—	
Land revenue	— 62,580
Palmyra cess	+ 9,435
Net Decrease ...	—53,145

29. The available assets for making up for this loss consist of 38,604 acres of waste assessed at Rupees 17,148, and occasional second crop to the extent of 2,500 acres assessable at Rupees 6,000, which may eventually be brought to puttas in favorable season.

30. On the completion of certain improvements on the hills in connection with the rivers of the Karumbandiyammankal channel, Pachaiyar, and Nambiyur contemplated, the irrigation of the taluq will receive good benefits not only in bringing back most of the lands now transferred to Punjab and extension of wet cultivation in Punjab on the eastern plains which are naturally even and fit for Nunjah, provided water is available. An increase will also result in the extent of second crop cultivation. All the Ponaikalams or rain-fed tanks will be much improved, which will result in securing to them better irrigation and enabling an extension of cultivation.

It will be no wonder that by proper development of all the possible resources of irrigation and improvement of tanks and channels, a very great portion of the loss in revenue now apparent may be regained in all favorable seasons.

31. Already were forwarded six scroll maps to show the mode of assessment pursued in the different tracts of the taluq. A revised final taluq map was also then despatched.

32. The alphabetical list, diglot registers, descriptive memoirs, and eye-sketches have already been submitted.

(True Copy.)

(Signed) R. K. PUCKLE,
Director of Revenue Settlement.



Nanguneri Taluk—Timereddy District.
Statement showing the Financial result of Settlement as compared with sanction.

Particulars.	As per SANCTIONED REDUCTION.						As per FINAL SETTLEMENT.						Difference between Columns 9 and 16.		
	Irrigated.		Dry.		Total.		Irrigated.		Dry.		Total.				
	1st Crop.	2nd Crop.	Total.	Deduct Chatur-begam.	Remainder.	1st Crop.	2nd Crop.	Total.	Dry.	Total.	Deduct Chatur-begam.	Remainder.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
River Valley first reported on	Rs. —27,203	Rs. —10,013	Rs. —37,216	Rs. —1,275	Rs. —38,491	Rs. ..	Rs. —12,544	Rs. —6,948	Rs. —19,492	Rs. +53	Rs. —19,439	Rs. +567	Rs. —18,872	Rs. —19,619	Rs. 24.
Palmyra Forest	+ 906	+ 143	— 763	— 859	— 1,622	..	— 1,622	— 957	— 545	— 1,502	— 913	— 2,416	+ 322	— 2,093	— 471
Remaining portion ..	— 28,507	— 20,000	— 48,507	— 8,588	— 57,095	+ 7,700	— 24,951	— 18,855	— 43,806	— 12,268	— 56,074	+ 1,824	— 54,260	— 4,866	
	— 66,616	— 29,870	— 86,486	— 10,722	— 97,208	+ 7,700	— 89,508	— 38,452	— 64,800	— 13,128	— 77,928	+ 2,713	— 75,216	— 14,293	

(Signed) T. VENKATA CHARRIAR,
Special Assistant to Collector.

(True Copy.)

(Signed) R. K. PUCCLE,
Director of Revenue Settlement.

SUBMITTED for the information of Government.

2. The Director of Revenue Settlement reports the revision of the assessment of the Nanguneri Taluq of the Tinnevelly District to have resulted in a decrease of Rupees 75,215* of revenue. This result is however more favorable than was anticipated by Rs. 14,293, the sanctioned reduction being Rupees 89,508, a loss

- *The computation at paragraph 28 of the Special Assistant's report is incorrect as he has taken into account transfers due to settlement instead of deducting only fixed remissions from the Jamabandi demand.

that was at first thought inevitable owing to the high rates of assessment and the anomalous charges prevailing in this taluq ; the careful treatment of the lands and the pains taken by the Special Assistant in making this settlement have kept down the loss by revision to a figure not much in excess of that of the average yearly remission, but these figures will not bear comparison as it is impossible now to determine how much of the yearly remission was debitible to over-assessment and the anomalous registry of the lands, and how much to failure of crop.

3. The averages arrived at are fair, viz., Rupees 7-2-5 an acre for river irrigation, Rupees 5-5-5 an acre for land under rain-fed tanks, and Annas 4-11 an acre for the poor sandy dry land on which palmyras chiefly grow. The treatment of these palmyras is an important part of the settlement, the charge on 1,837,000 trees being now consolidated and added to the land assessment of the fields on which they stand. Though the assessment thus brought to account is considerably in excess of that hitherto levied from the trees compounded for, it is impossible to frame a comparison, as the former charge on those particular trees is unknown. It is sufficient therefore to record that 1,837,000 trees compounded for and 743,000 trees not compounded for together now yield a revenue of Rupees 34,150 or Rupees 9,435 in excess of what they paid formerly.

4. The second crop assessment was usually charged on about 5,000 acres in this taluq. Four thousand seven hundred and sixty-seven acres have now been compounded for, leaving a very small area of possible second crop cultivation to require inspection in future. The loss of revenue by compounding the second crop charge is Rs. 26,348 as the second crop was usually charged at higher rates than the first crop.

5. The contingent advantages of making this settlement in securing the subdivision of common lands, the allotment of pasturage, the transfer of puttus, &c., are shown in paragraphs 4 to 7 of the Director's report, and the Board notice with satisfaction that the clubbing of inhabited villages was confined to twelve, which are said to be very small.

6. This settlement has come into force and the usual Jamabandi was made on the new settlement puttus last fasli.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Sub-Secretary.

To the Secretary to Government, Revenue Department.

Copy to the Collector of Tinnevelly.
,, " Director of Revenue Settlement.



1877.

Board of Revenue,
MADRAS.

PROCEEDINGS, 16TH OCTOBER 1877, NO. 4,746.

Encl.



Received

OCTOBER,
No. 4,746.

Settlement — of Nanguneri Taluk of Timmeyalli District. — Submitting to Government letter from Director of Revenue Settlement forwarding report of Special Assistant Venkata Chariar on —.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 28th January 1878.

Read the following letter from R. K. PUCKLE, Esq., Director of Revenue Settlement, to H. E. STOKES, Esq., Secretary to the Board of Revenue, dated Chingleput, 7th November 1877, No. 2,571-A—49 :—

I HAVE the honor to forward a report from the Special Assistant on the result of the Settlement of the Ottapidaram Taluq of the Tinnevelly District.

2. This taluq was taken up on the completion of Nanganeri in March last, and has occupied seven months to settle. A considerable portion of the adjoining taluq of Sattur was, however, settled simultaneously, and the average of the two will be well within the six months usually allowed.

3. A part of Ottapidaram near Tuticorin presented considerable difficulty as the waste Government lands under the Korampallam tank, the last supplied by the Srivaiguntam anicut on the north bank of the river, had to be laid out in blocks, and arrangements had to be made for cutting the needful distributing channels. All this I arranged for myself when last at Tuticorin and by parting with the right of occupancy at Rupees 15 an acre ordinarily and at Rupees 30 an acre in the bed of a ruined tank. I raised a sum of Rupees 6,190, and the channels are now nearly completed.

4. The bulk of the area capable of irrigation from the Korampallam tank is, however, inam and mittah, and as the landlords and tenants are at variance and there are no distributing channels in these villages some special arrangements will have to be made by the Collector and Engineer jointly before any revenue can be derived from the inam and mittah lands. The tank is one of the largest in the district, and the revenue to be derived from it is estimated at about Rupees 30,000.

5. The palmyras along the coast were treated in the usual manner, and an additional revenue of Rupees 1,242 has been brought in from their treatment.

6. Inland—the bulk of the area consisted of black cotton soil interspersed with small rain-fed tanks—the area under the latter was considerably overassessed formerly and the present settlement has reduced the charge by Rupees 2,079 on 2,628 acres, or by about 12 Annas an acre for single crop and by Rupees 545 for second crop. The charge for second crop, however, was mostly fictitious, there being really next to no second-crop water as is proved by only Rupees 83 of permanent double crop having been compounded at settlement in the entire taluq.

7. For the 156,658 acres of dry land the settlement average is 12 Annas 7 Pies an acre, precisely the same as formerly. A considerable area, however, was subject to Chatrabagam and Vararayat remissions. These remissions have now been abolished and all lands are charged full assessment. The average for the black cotton lands is Rupees 1-0-9 per acre, which corresponds with the assessment of the adjoining Zemindari lands, and the average for the red soil tracts is 6 Annas 2 Pies an acre, or rather more than the charge for the red soils in the river valley.

8. About 1,000 acres have been set aside as pasturage and 61 acres have been added to village sites where required.

9. There is much common land in this taluq ; nine villages are entirely held in common and in four others there is still common land. 3,661 acres in other villages were divided among 108 shareholders, but owing to the absence of many of the

shareholders in this disastrous year, the settlement officers failed to attain their usual success in division ; the shareholders, however, will soon be returning to cultivate and the Collector might arrange even yet to effect a division before the end of the fasli. It must be remembered, however, that a division on paper is of no use whatever, but each man's share must be marked on the ground, and the areas thus marked must be entered in individual puttas before Samudayum is really divided. 1,863 puttas were transferred with the consent of the parties concerned. Certain " Company pannei " lands, the escheated home farm of the Punjalan Kurichi Poligar, comprising 1,371 acres in five villages, are still charged with Swamibagum or landlord's rent in addition to the taram assessment, while the puttas stand in the name of the Government. A still larger area is held on like tenure in the Tenkarai Taluq, and as the continuance of this arrangement is somewhat anomalous it would be well perhaps to allow the ryots to redeem the Swamibagum in the same manner as inams are enfranchised. Puttas might then be given to such ryots as assent to these terms and the lands would be merely charged with their taram assessment hereafter.

10. The renewal of the demarcation in the sea coast villages was purposely omitted as the soil is mere shifting sand that only grows palmyras, and stones are not procurable except at a cost out of all proportion to any possible advantage to be gained.

11. The registers are now in the Press, and the records of this taluq will be handed over to the Collector immediately.

12. The total increase of revenue by settlement is Rupees 10,472 or 8 per cent. on the former revenue of the taluk.

ENCLOSURE No. 1.

From T. VENKATCHARRIAR, Special Assistant to Collector in charge of the Additional Sub-Collector's Office, Tinnevelly, to R. K. PUCKLE, Esq., Director of Revenue Settlement, dated Kovilpalli, 31st October 1877, No. 247.

I HAVE the honor to submit a report of the financial result of the Ottapidaram Taluk.

2. This taluk contained sixty-nine villages as per Jamabandi, but by amalgamation, clubbing and subdivision, and by transfer of

	No.
Total number of villages as per Jamabandi	69
Deduct—Transfer to Sattur	2
Do. to Sankaranainarcoivil	2
Decrease by amalgamation	1
	<hr/>
Add—Transfer from Sankaranainarcoivil	64
Increase by Sub-division	*10
	<hr/>
Total	76

* Eight in the Survey and only two in the final Settlement.

or by drainage from the upper dry fields or high mounds. The irrigation from the Korampallam tank is in its first infancy and it will develop itself to the full extent in the course of time. The ryots are reclaiming for nunjah their punjab lands and waste taken up for the purpose, and channels for irrigation are estimated, and they will soon be completed. Under this tank the better lands for irrigation are in the inam village of Korampallam and the mittah village of Kulayan Karisal. If the proprietors and ryots come to proper arrangement, and the latter reclaim their lands while the former provide branch channels, &c., for them, there will be a large income to Government by water-cess. Korampallam is perhaps the biggest tank in the district and has cost a great outlay to Government. The object of its construction is not only the extension of cultivation in the villages brought under it, but also the supply of fresh water to Tuticorin, a large and rising town on the sea coast with a large population of merchants, fishermen, and others, collected for trade, suffering for want of water. The construction of the tank and the extension of the Tambrapurni water to the town and its suburbs through the north main channel and the Korampallam tank under it have bestowed an immense deal of benefits on the town and have improved the face of it in point of fresh water-supply on a large scale through aqueducts and reservoirs constructed for the purpose by the Municipality. There are only two Government

villages in this tract that are now affected by the Korampallam tank irrigation, and out of the rest 42 are affected by rain-fed tanks and 32 are dry villages.

4. *Grouping of Villages.*—The villages irrigated by the Korampallam tank are placed in the 3rd group, and the rest in the 4th for settlement purposes.

5. *Classification of Soils.*—The soil is black, and red loam and sand, viz., a little less than half is black loam, and the rest red loam in the irrigated tracts and more than two-third black loam and the rest mostly red sand in dry as particularized below:—

Irrigation.	Group.	CLASSIFICATION.		Total Area in Acres.	CLASSIFICATION.		Total Area in Acres.
		Class.	Sort.		Class.	Sort.	
River irrigated.	3rd	4	2	147	2	1	15
		4	3	170	2	2	465
		4	4	312	2	3	505
	Total ...	...	...	629	Total ...	...	985
	4th	7	4	12	4	■	29,163
		4	2	20	4	3	31,862
		4	3	476	4	4	21,478
		4	4	353	4	5	14,850
		4	5	263	5	4	1,755
		5	3	10	5	5	2,526
		7	1	68	7	1	90
		7	2	656	7	2	436
		7	3	595	7	3	270
		7	4	106	7	4	2,665
		7	5	36	7	5	742
		■	3	3	8	1	1,772
		8	4	4	8	2	1,746
		8	5	26	8	3	7,890
	Total ...	...	...	2,616	8	4	22,812
	Total Rain-fed ...	...	...	3,628	8	5	13,962
	Total Irrigated ...	...	...	3,257	8	6	1,654
	Baling ...	...	...	44	Total Dry...	...	155,673
	Total Wet ...	...	...	3,301	Total Dry...	...	156,658

6. The assessment arrived at on the dry and wet lands are shown under each money rate now imposed in juxtaposition with the assessment that hitherto existed. The average rates of assessment are also exhibited against different items with the result of settlement.

DRY.

Rate per Acre.	AS PER SETTLEMENT.			AS PER JAMABANDI.			DIFFERENCE.	
	Extent.	Assessment.	Average.	Extent.	Assessment.	Average.	Extent.	Assessment.
							1	2
RS. A. P.	ACRES.	RS.	RS. A. P.	ACRES.	RS.	RS. A. P.	ACRES.	RS.
■ 0 0	15	76	... ■	14	68	4 13 8	1	8
3 8 ■	465	1,629	... ■	426	1,519	3 9 1	39	110
2 8 0	505	1,964	... ■	460	1,181	2 7 4	45	133
Total... ...	985	2,969	3 0 3	900	2,718	3 0 4	+ 85	+ 251
1 8 0	29,253	43,878	... ■	27,889	42,761	1 9 ■	+ 1,864	+ 1,117
1 ■ ■	34,070	34,075	... ■	32,558	39,138	1 3 8	+ 1,512	- 5,058
0 12 0	23,494	17,626	... ■	22,293	18,814	0 13 6	+ 1,201	- 1,188
0 ■ 0	25,405	12,766	... ■	24,143	12,324	0 8 ■	+ 1,262	+ 382
0 6 0	25,309	9,496	... ■	23,804	9,769	■ 7	+ 1,505	- 273
0 4 0	16,488	4,180	... ■	15,996	4,263	0 4 3	+ 490	- 133
0 3 0	1,654	311	... ■	1,143	232	0 3 ■	+ 511	+ 79
Total... ...	155,673	1,22,322	0 12 7	147,328	1,27,296	0 13 0	+ 8,345	- 5,074
Total Dry...	156,658	1,25,191	0 12 9	118,928	1,30,014	0 14 ■	+ 8,430	- 4,823
Total Dry and Wet ...	159,959	1,39,167	... ■	151,300	1,43,276	... ■	+ 8,659	- 4,109

7. From the above the following result will be gathered :—

River-irrigated Tract.—The rates imposed on this tract range from Rupees 7-8-0 to Rupees 4-8-0 per acre for single crop. About half of the irrigated area has been assessed at Rupees 6 and 7½ per acre. As per Jamabandi, these lands were either unassessed or assessed with a trifling punjab rate. The settlement average is Rupees 5-9-9 per acre for single crop, and a better average might have been expected had it not been for the lands irrigable under the big tank in Government villages are all poor sandy tracts or such as are impregnated with salt and soda. It is only a small extent and small beriz that may now come to account; but in the course of a short time a considerably larger area may come to assessment from punjab holdings of the ryots and from waste that may become fit for nunjah cultivation.

8. In the Government villages 1,200 acres may be expected to be gradually brought under cultivation which may fetch on an average about Rupees 5,000 more. In the Inam and muttah villages 3,000 acres may come under cultivation which may fetch about Rupees 12,000 as water-cess for a single crop. Water may become available for second crop, at least for half of this extent in this tract which may fetch a water-cess to the amount of Rupees 6,000. In the Government villages, also, about 1,000 acres may come to second-crop cultivation which may fetch an assessment of about Rupees 2,000 on an average. On the whole, the income under the Korampallam tank may be approximately estimated—at least Rupees 10,000 in the Government villages and Rupees 18,000 of water-cess in the Inam and muttah villages, making a total of Rupees 28,000 and may come up to Rupees 30,000 in the long run. These expectations cannot be said to be over-estimated, but may soon be realized to certainty provided all the needful was done by way of branch and drainage channels in all parts where extension of cultivation is feasible. All efforts must be put forth to bring the Muttahdar and Inamdar to excavate their channels for the ryots with whom they must be made to compromise. The ryots must be helped or rather encouraged to reclaim their lands and cultivate nunjah by the encouragement afforded to them by favorable and rather lenient consideration being accorded to them for a few years in the beginning in the charge of assessment. Your arrangements about laying out nunjah waste into acre blocks and providing some funds for the excavation of branch channel during the very short time you stayed at Tuticorin have given a very good impulse to the channel excavation work. In addition to these funds there must be a regular fund to about Rupees 10,000 at least spent to complete the more needful and effectual works towards the extension of cultivation. The Inamdar and Muttahdar must spend a similarly pretty good amount to encourage cultivation in their villages.

9. To the careful attention and energy to be displayed by Public Works Department on this point at an early possible date, must be added the care of the taluk officers to effect this most desirable end for the security of Government interest and making the Korampallam work really useful in point of income. The Tahsildar or other officers must be enabled to spend some time on the spot and encourage the ryots to undertake cultivation and afford them all the need-

ful facilities by way of excavation of channels, aqueducts, sluices, and drainages, and in effecting compromise between the Muttahdar and ryots. When the work is thus successfully started and the progress is made, and the season proves favorable, the expectations will be realized.

10. Rain-fed Tanks.—The rates imposed for lands under rain-fed tanks range from 6 to 2 Rupees an acre for single crop. A little less than half of the area of 2,628 acres is assessed at Rupees 4½ and 6 per acre. The assessment as per Jamabandi of Fashi 1286 was Rupees 12,349 for single crop with an average rate of Rupees 5-1-5 per acre; by settlement, it is Rupees 10,270 with an average rate of Rupees 3-15-0 per acre, exhibiting a loss of Rupees 2,079. The average rate arrived at is fair, being more than those obtained for rain-fed tanks in Tenkasi and Amba-

		RS. A
Tenkasi	... ... ...	3 13
Ambasamudram	... ... ...	3 14
Tinnevelly	... ... ...	4 4
Tenkasi	... ... ...	4 11
Nanguneri	... ... ...	5 5

Samudram Taluqs, though a little less than the rates arrived at in Tinnevelly, Tenkarai, and Nanguneri. Compared, however, generally with the rain-fed tanks of Tinnevelly, Tenkarai, and Nanguneri, those of Ottapidaram are far inferior and less favorably situated

for water-supply either in the midst of black-cotton soil where the tank is almost useless as a reservoir, the water oozing away or sinking in the earth soon after a few days of the rain and every fall of rain bringing good deal of deposit of earth, silt, or they are on or near gravelly and sandy hills where the bed soon silts with sand drift. The former rates were exorbitantly high in many cases, and the rates now imposed are fair and relieves the ryots, especially the shareholders or Chatarbogam losers, of much of the burden under which they were hitherto groaning. The small loss under this head is therefore inevitable and is but reasonable.

11. *The Lands supplied by Baling.*—Baling has in every case been assessed at half the assessment of the block in which it is situated. The extent under this head is very small. The assessment as per Jamabandi was Rupees 77 with an average rate of Rupees 1-14-1 per acre; by settlement, it is Rupees 94 with an average rate of Rupees 2-2-2 per acre, exhibiting a small increase of Rupees 17.

12. The total wet assessment as per Jamabandi was Rupees 12,634 with an average of Rupees 4-1-10; by settlement, it is Rupees 13,893 with an average rate of Rupees 4-3-9 per acre, making a total gain of Rupees 1,259 in the single-crop wet assessment.

13. *Second-crop Assessment.*—Under the head of the second-crop charge the assessment as per Jamabandi of Fasli 1286 was Rupees 628; by settlement, it is only Rupees 83. The charge hitherto made under this head was either nominal or such as could be realized only in favorable years. In the settlement, the ryots did not compound for second-crop charge, excepting in one or two cases where the ryots wanted very much to compound owing to favorable circumstance under which the lands were situated.

14. In the river-irrigated tract, second-crop charge may be compounded for largely. But as the cultivation is in its cradle, the ryots were not allowed to compound, pending the result of regularly extended cultivation and the steadiness of water-supply for a second crop. Under the rain-fed tanks the ryots were generally allowed to withhold compounding as the growth of a second crop is precarious and scanty, there being no facilities for the same.

15. *Dry Lands under Government Wells.*—The assessment as per Jamabandi of Fasli 1286 was Rupees 2,718 with an average rate of Rupees 3-0-4 per acre; by settlement, it is Rupees 2,969 with an average rate of Rupees 3-0-3 per acre, exhibiting an increase of Rupees 251. The rates imposed range from Rupees 5 to Rupees 2-8-0; about half the area of 985 acres is assessed at Rupees 5 and Rupees 3-8-0 per acre.

16. *Ordinary dry Lands*.—The assessment as per Jamabandi of Fasli 1286 was Rupees 1,27,296 with an average rate of Rupees 0-13-10 or Rupees 0-12-7 excluding Chatarbogam; by settlement, it is Rupees 1,22,222 with an average of Rupees 0-12-7, exhibiting a loss of Rupees 5,074. For the black-cotton soil above, the average is Rupees 1-0-9 as per settlement against

Rupees 0-15-11 average rate excluding Chatarbogam. Rupees 1-2-0 per acre as per Jamabandi. The average is very fair compared with the average obtaining in all the better tracts of the Ettiyapuram and other Zemindaries where the general

Rupees 0-6-5 average rate excluding Chatarbogam. as per settlement compared with Rupees 0-7-0 per acre as per Jamabandi, and far in excess of the rates obtained for the red soil in the river-irrigated taluqs.

17. The total dry assessment including the lands under Government wells was, as per Jamabandi, Rupees 1,30,014, with an average rate of Rupees 0-14-0 or Rupees 0-13-0 per acre excluding Chatarbogam; by settlement, it is Rupees 1,25,191 with an average rate of Rupees 0-12-9 per acre, resulting in a falling off of Rupees 4,823.

18. The total assessment wet and dry as per Jamabandi was Rupees 1,42,648 ; by settlement, it is Rupees 1,39,084 exhibiting a decrease of Rupees 3,564. Adding to this the loss of Rupees 545 under the head of Second-crop charge, the total loss is Rupees 4,109. Deducting the

fixed remissions of Chatarbogam, Rupees 11,404, from the Jamabandi, and making the comparison, there is an increase of Rupees 7,295.

19. *Palmyras.*—The total number of palmyras as per previous year's account was 83,244 charged with an assessment of Rupees 2,308; by settlement, it is 123,226 assessed at Rupees 3,472, besides seedlings numbering 80,018, of which 31,055 have been charged with Rupees 78, and the remaining 48,963 has yet to be charged, thus making a total of charge on palmyras Rupees 3,550. The charge on palmyras in the cultivated fields has, for a great part, been consolidated with the land assessment, viz., Rupees 2,457 on 84,387 out of 123,226 big palmyras, and Rupees 78 on 31,055 out of 80,018 seedlings. The subjoined table will exhibit in one view the particulars of the palmyras, the assessment on which has been consolidated with the land-tax and of those on which the cess has not been consolidated. The palmyras in this taluk are mostly confined to the few sea-coast villages and a few of the villages adjoining rivers and sand hills, there being almost none in the black-cotton plains and its vicinity:—

Particulars.	PALMYRAS.				
	Palmyras.	Assessment.	Seedlings.	Assessment.	Assessment.
<i>As per Settlement</i>					
Consolidated	84,387	2,457	31,055	78	2,535
Not consolidated	38,839	1,015	48,963	..	1,015
Total ...	123,226	3,472	80,018	78	3,550
<i>As per Jamabandi</i> ...	83,244	2,308	...	...	2,308
Difference ...	+ 39,982	+ 1,164	+ 80,018	+ 78	+ 1,242

20. The principle followed in the settlement of the palmyras is the same as that pursued in the settlement of the river-irrigated taluqs. The result of settlement on palmyras is an increase of Rupees 1,242 in the assessment.

21. *Pasturage.*—Putta lands to the extent of 603 acres, assessed at Rupees 262, have been set aside for pasturage in four villages, besides 400 acres of waste land intermixed with them which were also added to the area of pasture ground. In the other villages, noputta nor waste lands were specially asked to be set aside for pasturage either owing to the lands consisting of black-cotton soil being too valuable to be given up for the purpose, or owing to the facility of finding pasturage in the adjoining sandy and gravelly hills, river or jungle streams and other poramboke.

22. *Building Site.*—About 61 acres, assessed at Rupees 35, have been added to the village building sites in twenty villages where the extension of the village sites was needed.

23. *Division of common Lands.*—Lands to the extent of 3,861 acres held in common have been divided among 108 shareholders in four villages and the sharing system in connection with these lands has entirely ceased. There remain some lands in fourteen villages of which nine villages contain the whole of its lands as common, and the remaining five contain only a small extent of common lands in each. Every effort was made by the ryots and officials to have these Samudayams divided, but to no effect, owing especially to the absence of a large number of shareholders at Trevandrum and other places in consequence of the severe effects of this unparalleled famine. Without the expressed consent of all the shareholders, no subdivision of Samudayam could be effectually carried out. All the existing ryots were asked to use their best endeavors to get this desirable end accomplished, and those that were present used their best attempts to respond to the call, but without their neighbours to sign the Kaitadies or lists of subdivision, their exertions became useless. During the progress of work, every facility was secured for a speedy and easy subdivision of the common lands at an early date when the shareholders again assemble. In some cases, notes were taken together with the Curnams and existing ryots for the preparation of a Kaitadi and in others Kaitadies have also been actually prepared, though they could not secure the signature of many of the shareholders.

24. *Transfer of Puttas.*—One thousand eight hundred and sixty-three puttas have been transferred with the consent of the parties concerned.

25. *Company Pannai Lands or Government Farm Lands.*—In this taluk there is an area of 1,371 acres, assessed at Rupees 1,532 in five villages in the Vilattikulam Division, consisting of 22 acres of irrigated lands assessed at Rupees 118, and 1,349 acres of punjab assessed at Rupees 1,414

held by Government by a *putta* issued under the designation of Company Pannai or Government Landlords Rent.

The cultivation is carried on by the ryots who pay *Swamibagam** in addition to the taram assessment on punjab lands. The nunjah is made over in auction to the highest bidder on annual *Swamibagam* in addition to the taram assessment. There are lands that once belonged to one Kattabomma Naikan, a State prisoner, as private farm who was levying *Swamibogam* or landlord's rent in addition to the land-tax. The practice has been continued by Government who preserved the tenor of this private farm ever since the lands were attached and added to the State, nothing having been done to dispose of the lands to the cultivators or others and get rid of the Government *putta*.

26. Similar lands exist in a larger scale in the Tenkarai Taluq where a reference having been made about the disposal of the lands. order (16th February 1876, No. 226,) has been passed to continue the practice of levying *Swamibogam* as usual.

27. *Redemarcation*.—Redemarcation was completed in all the villages in the taluq excepting 10 villages or parts of them in the sandy tracts and places where a large number of ryots were absent owing to famine, especially in the Villattikolam Division. In the sandy tracts of Tuticorin, Vypar, &c., the redemarcation and sinking of stones to the level of the ground have been stopped as has been done in the sand hills of the Tenkarai Taluq. In the other parts where the ryots were absent the work was left incomplete in one or two kandams here and there, but it is being completed by a few hands as most of the ryots have now returned to their villages and the ground is sufficiently wet for planting stones. The work that remains to be done is but small and it will be completed at no distant time. In 38 villages of the Tuticorin and Ottapidaram Divisions and a part of the Kayattar Division the work was inspected by Dorasawmy Iyer, Deputy Inspector, specially deputed for the purpose, in co-operation with Head Classifiers Kistnasawmy Iyengar, Rama Chendra Row, and Tirakamiah who have worked at different times in this division under Supervisor Balu Naidu. In the remaining portion of the Kayattar division, consisting of 28 villages, the work was inspected by Head Classifier Mutusawmy Iyangar, Ramaseshaiyar, and the Head Demarcator Subramaiyar of the Coimbatore Party under Supervisor Ramaiyar. The two Supervisors have generally inspected in different parts of their divisions at all times of their inspection of villages and superintending over registration in the fields and blocking out classification.

28. Mr. Bird visited all of the villages in the Tuticorin Division and several of those in Ottapidaram Division, as the redemarcation was then being made, and was in point of completion. I have, together with the two Supervisors and Head Classifiers, gone over the different tracts of their divisions in blocking out classification while the redemarcation was in progress in some large villages and where they had been completed by that time in others, and I am satisfied that much care has been generally bestowed by the officials and their supervisors as well as by the ryots in the redemarcation. Where any deficiency was observed in the matter either in point of imbedding stones or other, the ryots were made to take an interest in the matter by good advice and impression made in their minds of the importance and necessity of attending to the work for their own good, and by insisting on the indispensability of their effectually doing it then and there.

29. To summarize the results of the settlement in the taluq of Ottapidaram, the heavy and anomalous rates of assessment on irrigated lands under rain-fed tanks and on dry lands in inferior tracts in the vicinities of jungle streams impregnated with soda and lime or adjoining sand hills and gravelly tracts have been got rid of, and fair rates imposed as suited to the circumstances of the country.

30. All nominal second crop charges in nunjah have been stopped.

31. The fluctuating charges on palmyras have been compounded for permanently consolidated cess in all possible cases.

32. *Transfers of Puttas*.—One thousand eight hundred and sixty-three puttas were transferred in all unobjectionable cases.

33. *Division of Common Lands*.—Common lands were divided in all feasible cases and arrangements made for a speedy division of the remaining as far as practicable in the usual course.

34. The permanent remissions known locally as Dupatimaniem, Ivu Dittamaniem, and Stalamkaval, amounting to Rupees 1,620, have been brought to the credit of the general fund for the payment of the village establishment.

35. Lands held on favorable terms by privilege classes (Chaterobogm, &c.) have been brought to full assessment.

36. *Pasturage*.—Pasture lands were provided for in a few cases where they were required.

37. *Building Site*.—Extension of building sites was arranged for according to the actual requirements of the ryots.

38. The total final net result of settlement compared with the Jamabandi of Fasli 1286, after deducting permanent remissions and net loss of revenue by transfer of items from the Jamabandi assessment and adding the increase of palmyra revenue, is a gain of Rupees 10,472 specified below :—

Total Jamabandi assessment 1,43,746

Deduct loss of time.

Transfer to Poramboke, such as village-sites, pasturage, &c. 363

Relinquishment 107

RS.

470

Remainder ... 1,43,276

Deduct permanent remissions.

Chaterbogam 11,192

Shrotriem and Varariyayat... 212

11,404

Remainder ... 1,31,872

Deduct also Net loss of transfer of Items.

RS.	
Nunjah to Punjab 1,241	
Baling to do. 38	
Garden to do. 147	
Two crop to one crop 628	
<i>Deduct Increase.</i>	2,054

One crop to two crop 71	
Punjab to Nunjah 42	
Do. to Garden... 6	
119	1,985
Remaining Jamabandi Assessment 1,29,937	
Palmyra assessment 2,308	
Total ...	1,32,245

As per Settlement.

RS.
Land Revenue... 1,39,167
Palmyra Cess 3,550
1,42,717

Net Result.

RS.
Land Revenue + 9,230
Palmyra Cess... + 1,242
Net Increase ... + 10,472

39. The available assets in this taluk for further increase of revenue consists of Rupees 3,500, being assessment of irrigated and dry waste in all other villages but those affected by the

* Amount estimated in paragraph 8 30,000 RS.
Deduct assessment already brought to account out of occupied nunjah in Government Villages ... 3,500 Government Villages and the Inam and Muttah Villages under the Korampallam tank supplied by the north main channel from the Streevy-guntam Anicut as above particularized under the head of assessment, making up a total of Rupees 30,000.

40. I beg to forward herewith the revised final taluk map showing the irrigation, &c., and scroll maps to show the mode of assessment pursued in different tracts of the taluks.

41. The diglott registers and descriptive memoirs and eye sketches of all the 76 villages have already been submitted.

(True Copy.)

(Signed) R. K. PUCKLE,
Director of Revenue Settlement

With the foregoing letter the Director of Revenue Settlement submits a report on the settlement of the Ottapidaram Taluk of the Tinnevelly District which has been carried out by the application of the table of rates adopted for the rest of the district under the sanction conveyed in G.O., dated 22nd May 1877, No. 1,779.

2. The taluk formerly comprised 69 villages; the net result of clubbing, subdivision, and transfers is an increase of seven. The irrigated area is small amounting to only 3,301 acres out of a total of 159,959; the source of supply is chiefly rain-fed tanks at present, but a considerable extension of wet cultivation is expected from the Karampallam tank supplied from the Streevyguntam anicut on the north bank of the river, where certain disputes between the Inamdar who own the bulk of the land under this source and their tenants have been settled and distributing channels supplied. The possible increase of revenue is estimated at about Rupees 26,500—*vide* paragraph 39 of the Special Assistant's report. The attention of the Collector is called to paragraph 4 of the Director's report and he will take the matter into consideration at an early date. The irrigated villages have been placed in two groups, those under the Karampallam tank being placed in the third group and the rest in the fourth.

3. The soil in the irrigated tracts is black and red loam in nearly equal proportions; in the dry tracts more than two-thirds is black loam and the rest mostly red sand. The revised assessment and area by survey are shown in comparison with the old area and assessment in the subjoined abstract:—

	AREA.		ASSESSMENT.		DIFFERENCE.	
	By Py-mash.	By Survey.	As per Jama-bandhi of Fasli 1286.	Revised.	Extent.	Assessment.
River-irrigated	603	629	208	3,529	+ 26	+ 8,321
Rain-fed. { 1st crop ..	2,428	2,628	{ 12,349	10,270	{ + 200	— 2,079
{ 2nd crop.			616	83		— 533
Baling	41	44	89	94	+ 3	+ 5
Total Wet ...	3,072	3,301	13,262	13,976	+ 229	+ 714
Dry lands under Government wells.	900	985	2,718	2,969	+ 85	+ 251
Ordinary dry lands ...	147,328	155,673	127,296	122,222	+ 8,345	— 5,074
Total Dry ...	148,228	156,658	130,014	125,191	+ 8,430	— 4,823
Grand Total ...	151,300	159,959	143,276	139,167	+ 8,659	— 4,109

4. The increase in the area by survey is a little more than $5\frac{1}{2}$ per cent. The financial results have been incorrectly calculated at paragraph 38 of the Special Assistant's report, transfers due to settlement having been taken into account, whereas the permanent remissions discontinued at settlement should alone have been deducted from the Jamabandi demand. Applying the necessary correction the account will stand thus—

Assessment of Fasli 1286 as given at paragraph 38	... ... ...	... ...	1,43,746
Deduct permanent remissions	... ... ...	... ...	11,404
			1,32,342
Add Palmyra Assessment	... ... ...	... ...	2,308
Total ...	1,34,650		

Rerised Settlement.

Land Revenue ...	1,39,167
Palmyras ...	3,550
	1,42,717
Net Increase ...	8,067

or not quite 6 per cent. instead of 8 per cent. on the former revenue.

5. The following statement shows the area under each of the wet and dry rates with the proportion to the total extent:—

WET.			D.Y.		
Rate per Acre.	Survey Area.	Percent.	Rate per Acre.	Survey Area.	Percent.
Rs. A. P.			Rs. A. P.		
7 8 0	147	4·5	5 0 0	15	...
6 0 0	258	7·9	3 8 0	465	3
4 8 0	1,444	44·3	2 8 0	505	3
3 12 0	100	3·	1 8 0	29,253	18·7
3 8 0	960	29·5	1 0 0	34,070	21·8
3 2 0	12	·4	0 12 0	23,494	15
3 0 0	282	8·7	0 8 0	25,405	16·2
2 8 0	28	·9	0 6 0	25,309	16·1
2 0 0	26	·8	0 4 0	16,488	10·5
...	...	...	0 3 0	1,654	1·1
Total ...	3,257	100·0	...	156,658	100·0

About two-thirds of the wet land is assessed at from Rupees 3-8-0 to 4-8-0 and the bulk of the dry land is rated at from 6 Annas to a Rupee and a half per acre. The average wet rate is Rupees 4-3-9 against Rupees 4-1-10 according to the accounts of Fasli 1286 and the average dry rate 12 Annas 9 Pies as compared with 14 Annas. The lands under rain-fed tanks having been formerly over-assessed relief has been afforded by a reduction of about 12 Annas an acre. There is but little second crop land; lands irrigated by baling have been rated at half the assessment of the block in which they are situated. The palmyras have been treated as usual; the total revenue derived therefrom is Rupees 3,550 as compared with a former charge of Rupees 2,308, the increase being Rupees 1,242.

6. Building sites have been extended and grazing grounds assigned where necessary, puttus revised, and common lands sub-divided so far as was possible. The Collector's attention is called to the remarks of the Director at paragraph 9, and he should endeavour to effect a division of the remaining Samudayam land as soon as may be; matters are probably too unsettled to admit of its being carried out within the current fasli. The redemption of the "Swamibogam" at 25 years' purchase, wherever the ryots assent, has been recently authorized—G.O., dated 7th January 1878, No. 16. There does not however seem to be much disposition to redeem, and there is no object in forcing redemption.

7. The Board consider the settlement of the Ottapidaram Taluq satisfactory and recommend that it be confirmed.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Sub-Secretary.

To the Secretary to Government, Revenue Department.

.. the Collector of Tinnevelly.

.. the Director of Revenue Settlement.

Exd. A. Grubert, W. H. French, and W. J. Lewis.

1878.

**Board of Revenue,
MADRAS.**

PROCEEDINGS, 28TH JANUARY 1878, NO. 232.

Encd.



Received

JANUARY.

No. 232.

Settlement of Ottapidaram Taluk in Tinnevelly District.—Considering the — satisfactory and recommending that it be confirmed.

No. 563.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 1st March 1878.

Read the following letter from R. K. PUCKLE, Esq., Director of Revenue Settlement, to H. E. STOKES, Esq., Secretary to the Board of Revenue, dated Ongole, 1st February 1878, No. 138-3.

I HAVE the honor to forward herewith the Special Assistant's Report on the Settlement of the Sattur Taluq of the Tinnevelly District.

2. This taluq formerly comprised seventy-one villages, but for the greater convenience of the ryots one small village was clubbed with that to which it really belonged and several large villages were sub-divided. Some transfers too of outlying villages were made with adjoining taluqs, the result giving eighty-four villages to Sattur.

3. The irrigated lands of these villages are placed in the 4th group as the tanks are all rain-fed, and the one river channel in the taluq brings down a soda deposit that renders the water inferior for irrigation purposes to that of the rain-fed tanks.

4. The bulk of the area is black cotton soil, but in some parts there are red soil uplands. The garden lands are especially good, and about 1,902 acres are assessed at from Rupees 5 to Rupees $2\frac{1}{2}$ an acre; 110,602 acres of ordinary dry land are assessed at from Rupees $2\frac{1}{2}$ to Rupee 1; and the remainder at from 12 Annas to 4 Annas an acre.

5. The irrigated area is but 4,152 acres, and this is of the poorest description, assessed at an average of Rupees 4-9-2 an acre, which accords sufficiently nearly to the average under rain-fed tanks in other parts of the district.

6. The second crop charge is compounded on 539 of the 610 acres cultivated with a second crop last year, and in this item there is a reduction of 1,229 Rupees. Altogether the reduction on wet lands is Rupees 4,619, or Rupees 1-2-0 an acre.

7. The charge on the dry land remains almost unaltered by settlement, being Rupees 1-3-9 against a nominal charge of Rupees 1-4-9 an acre formerly, but by the abolition of percentage reductions in favor of privileged classes there is a total increase by the settlement of this taluq of Rupees 4,438.

8. There are very few palmyrahs, but where they occur their assessment has been consolidated at Rupees 136 against a fluctuating charge of Rupees 99 last year.

9. The common lands have been divided in only two villages, leaving twenty-two villages still undivided owing to the absence of most of the share holders in this exceptional season; 1,19 $\frac{1}{2}$ puttahs were, however, transferred with the consent of the parties concerned.

10. The fields have been all redemarcated and the stones embedded so far as to show only their tops above ground. Particular attention has been paid to this work which is very necessary in a black cotton country.

11. There is but little waste in the taluq and if all this is cultivated it will yield but Rupees 4,560 per annum.

ENCLOSURE NO. 1.

From T. VENCATA CHARRY, Special Assistant Collector, Revenue Settlement, Tinnevelly, to
R. K. PUCKLE, Esq., Director of Revenue Settlement, dated Srivilliputtur, 11th
January 1878, No. 6.

I HAVE the honor to submit a report of the financial result of the Revenue Settlement of the Sattur Taluq.

2. The taluq contained prior to settlement seventy-one villages as per Jamabundi; but by transfer of villages from and to the Srivilliputtur Taluq, and from Sankaranainarcovil and Ottapidaram Taluqs, by clubbing of a small

Total number of villages as per Jamabundi ..	..	71	village with a neighbouring larger one, and the
Deduct transfer to Srivilliputtur .. ..	..	3	sub-division of big villages into two or more as
Remainder ..	..	68	particularized in the margin; it now contains
Add increase by transfer from Sankaranainarcovil.	..	2	eighty-four villages, consisting of 184,217 acres
Ottapidaram .. ..	..	2	or 288 square miles.
Srivilliputtur .. ..	..	4	
		— 8	
	Total ..	76	
Deduct decrease by clubbing .. ..	..	1	
Remainder ..	..	75	3. IRRIGATION.—This taluq is chiefly
Add increase by sub-division of big villages ..	..	9	irrigated by rain-fed tanks supplied by jungle
Total as per Settlement ..	..	84	streams, or by drainage from the upper fields

jungle stream in inferior cotton soil. The water its channel brings down to the tanks and lands are so poor and so much impregnated with soda, lime, and salt that it deteriorates the soil very much. The tanks that depend upon this supply are also partly rain-fed. The channel led off from the minor river does not carry water to the tank except in rainy seasons. The irrigation under the streams is, however, distinguished from the regular rain-fed tanks.

4. GROUPING OF VILLAGES.—The villages irrigated by the minor rivers and rain-fed tanks in the taluq are placed in the 4th group for settlement purposes. The irrigation from the minor rivers is poorer than that from the rain-fed tanks, and does not therefore deserve to be placed in a higher group than the rain-fed tanks.

5. CLASSIFICATION OF SOILS.—The soil is chiefly black loam both in dry and irrigated lands. In the former more than six-sevenths is black loam and the rest chiefly red sand. Black sand and red loam are very rare. In the irrigated more than four-fifths is black loam and the rest principally red loam, red sand being meagre. The following table exhibits the description, quantity, and relative proportions of the soil classified :—

Wet or Irrigated.

CLASSIFI- CATION.		AREA IN ACRES.		
Class.	Sort.	River Irrigated.	Rain-fed.	Total.
4	1	...	34	...
4	2	215	446	...
4	3	597	1,277	...
4	4	345	462	...
4	5	...	64	...
7	1	...	202	...
7	2	...	347	...
7	3	...	88	...
7	4	...	21	...
8	1	...	21	...
Baling		1,157	2,962	4,119
		...	...	33
				4,152

Dry.

CLASSIFICATION.		Total Area in Acres.	CLASSIFICATION.		Total Area in Acres.
Class.	Sort.		Class.	Sort.	
2	1	289	7	1	1,082
2	2	1,046	7	2	515
2	3	567	7	3	305
...	...	1,902	7	4	1
4	1	7,626	8	1	4,831
4	2	44,449	8	2	12,351
4	3	51,688	8	3	2,204
4	4	15,344	8	4	1,116
4	5	1,677	8	5	415
5	1	411	...	...	22,820
5	2	756	...	...	144,903
5	3	132	...	...	146,805
...	...	122,083			

6. The assessment arrived at on the dry and irrigated lands of the taluk are shown under each money-rate now imposed in juxtaposition, with the assessment that hitherto prevailed. The average rates of assessment are also exhibited against the different items with the result of settlement.

Wet or Irrigated.

Irrigation.	AS PER SETTLEMENT.										AS PER JAMABANDI.										Difference.	
	RATE PER ACRE.					ASSESSMENT.					ASSESSMENT.					ASSESSMENT.						
	First Crop.	Second Crop.	Total.	Survey Area in Acres.	Average.	First Crop.	Second Crop.	Total.	Old Area in Acres.	First Crop.	Second Crop.	Total.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
River irrigated ..	6 0 0	4 8 0	.. { 3 8 0	6 0 0	6 0 0	215	1,290	..	1,290	2,687	..	2,687	..	207	1,093	10	1,103	5 4 6	..	..	..
	..	..	..	..	..	597	2,687	..	597	1,305	..	1,305	..	315	1,631	9	2,901	5 0 11	..	..	..
						345	1,305	..							2	1,633	5 2 10					
Total ..	..	..	..	..	..	1,157	5,183	..	5,183	4 7 8	..	4 7 8	..	1,093	5,616	21	6,637	5 2 2	+ 63	..	433
Rain-fed ..	7 8 0	6 0 0	1 8 0	7 8 0	34	952	..	952	..	131	..	131	..	31	245	2	247	7 14 5	..	..	..
	..	..	..	..	..	87	592	..	661	3,886	..	3,886	..	597	3,986	16	642	7 14 9	..	..	..
						661	3,886	..	661	509	..	509	..	407	2,342	333	3,275	7 3 8	..	..	..
						452	2,034	..	1,193	5,858	..	5,858	..	1,161	6,255	701	6,956	5 10 11	..	..	..
						452	2,034	..	550	1,928	..	1,928	..	506	2,335	169	2,504	4 9 10	..	..	..
						85	262	..	85	262	..	262	..	79	326	7	333	4 2 0	..	..	..
Total ..	..	..	..	..	..	2,962	12,132	640	14,372	4 10 2	..	4 10 2	..	2,730	16,715	1,846	18,561	6 2 0	+ 232	..	2,983
Total Irrigated ..	..	..	..	..	..	252	..	252	..	131	..	131	..	31	245	2	247	7 14 5	..	..	..
Bailing ..	..	..	..	..	..	592	4,636	..	6,055	4,636	..	6,055	..	734	6,079	16	642	7 14 9	..	..	..
Total Wet ..	..	..	..	..	..	452	2,034	..	509	2,543	..	2,543	..	407	2,642	333	3,275	7 3 8	..	..	..
Including Second Crop ..	..	..	..	..	..	1,730	8,055	..	8,055	3,134	..	3,134	..	1,673	9,147	710	9,857	5 7 6	..	..	..
						895	3,134	..	895	262	..	262	..	821	3,966	171	4,337	4 13 3	..	..	..
						85	262	..	85	262	..	262	..	79	326	7	333	4 2 0	..	..	..

Dry.

Rate per Acre.	As per Settlement.			As per Jamabandi.			Difference.	
	Extent.	Assessment.	Average.	Extent.	Assessment.	Average.	Extent.	Assessment.
RS. A. P.	ACRES.	RS.	RS. A. P.	ACRES.	RS.	RS. A. P.	ACRES.	RS
5 0 0	289	1,444	..	272	1,718	6 5 1	..	..
3 8 0	1,046	3,660	..	958	3,823	3 15 10	..	..
2 8 0	567	1,418	..	542	1,095	2 0 4	..	..
Total ..	1,902	6,522	3 6 10	1,772	6,636	3 11 11	+ 130	- 114
2 8 0	7,626	19,066	..	7,483	16,035	2 2 3	..	..
1 8 0	45,531	68,301	..	43,339	66,402	1 8 6	..	..
1 0 0	57,445	57,456	..	54,197	58,691	1 1 4	..	..
0 12 0	26,756	21,572	..	26,497	23,077	0 13 11	..	..
0 8 0	4,014	2,008	..	3,783	2,474	0 10 6	..	..
0 6 0	1,116	419	..	1,071	405	0 1 1	..	..
0 4 0	415	104	..	415	109	0 4 2	..	..
Total ..	144,903	168,926	1 2 8	136,795	167,193	1 3 7	+ 8,118	+ 1,733
Total Dry ..	146,805	176,448	1 3 2	138,557	173,829	1 4 1	+ 8,248	+ 1,619
Deduct Chaturbagam, &c. ..	..	..	..	..	7,438	..	..	..
Remainder ..	..	..	..	..	166,391	1 3 2	..	+ 9,057
Total Dry and Wet ..	150,957	196,063	..	142,413	198,063	..	+ 8,544	- 3,000
Deduct Chaturbagam, &c.* ..	..	..	..	..	7,438	..	..	..
Remainder ..	..	..	..	..	190,625	..	..	+ 4,438

*	Chaturbagam	..	..	..	..	1,553
	Ardhamaniem	..	..	..	..	3,369
	Shrotriem	..	..	..	..	2,514
					Total ..	7,438

7. From the above the result will be gathered as follows.

8. LANDS IRRIGATED BY MINOR RIVERS.—The rates imposed on this tract range from Rupees 6 to 3-8-0. About three-fourths of the area is assessed at Rupees 4-8-0 and 6 an acre. The settlement of this tract exhibits a small decrease of Rupees 433 or about 8 per cent. on single crop. The settlement average per acre is Rupees 4-7-8, while the Jamabandi average was Rupees 5-2-2. Hitherto the same average rate was imposed on all lands under a tank good and bad; but in the settlement proper rates have been adopted for different descriptions of soil with reference to the position, quality, and irrigation, and those only that are worst, being poorly irrigated on high level and impregnated with much more soda, salt, and lime than the rest, have been taken at Rupees 3-8-0.

9. RAIN-FED TANKS.—The rates imposed upon the area under rain-fed tanks range from Rupees 7-8-0 to 3 an acre for single crop. More than three-fourths of the area is assessed at Rupees 4-8-0, 6, and 7-8-0. The assessment as per Jamabandi of Faasli 1286 was Rupees 16,715

Rain-fed Tanks.

	Average rate per Acre. RS. A. P.	for single crop with the high average rate of Rupees 6-2-0 per acre; by settlement it is Rs. 13,732 with an average rate of Rs. 4-10-2, resulting in a loss of Rupees 2,983. The rates that hitherto prevailed on rain-fed tanks in this taluq were anomalously high as in Nanguneri, so that they ranged above Rupees 8 in detail on many tanks similar to those imposed on regular river irrigated good tracts in the valley. The average rate arrived at the settlement is fair and rather strict, being higher than those obtained in Tenkasi, Ambasamudram, Tinnovelly, and Ottapidaram, and a little less than those in Tenkarai and Nanguneri.		
		..	3 13 8	..
Tenkasi	3 13 8	..
Ambasamudram	3 14 5	..
Tinnovelly	4 4 9	..
Tenkarai	4 11 3	..
Nanguneri	5 5 5	..
Ottapidaram	3 15 0	..
Satur	4 10 2	..

10. As stated in the report of the Ottapidaram Taluq, the rain-fed tanks in this taluq also are, with exceptions, generally inferior and unfavorably situated for supply, either in the midst of black cotton soil where the tank becomes useless as a proper reservoir, the water oozing away or sinking in the earth soon after a few days of the rain and the beds being filled year by year by good deal of deposit of earth silt, or they are near sandy mounds and river sand drifts, which fill the bed of the tank with sand silt. Excepting in very favorable years, these tanks generally suffer for want of water enough to the growth of full nunjah crop. Even in ordinary years the crops suffer and become withered or the ryots resort to the cultivation of punjab crops, such as samai, tenai, raggy, cumboo, and cotton. The former rates were certainly exorbitantly high under these poor tanks, and the present rates relieve the ryots, especially the shareholders or Chaturbagamdar, of much of the burden they were hitherto laboring under. The loss under this head cannot be avoided as the former exorbitant rates fixed in the gross on lands good and bad were unreasonable and incompatible with the principles of classification and Revenue settlement.

11. LANDS SUPPLIED BY BALING.—Baling is rather rare in this taluq, and what exists has, in every case, been assessed at half the assessment of the block in which it is situated. The assessment as per Jamabandi was Rupees 34 for single crop with an average rate of Rupees 1-0-6 per acre; by settlement it is Rupees 60 with an average of Rupees 1-13-1 per acre, showing an increase of Rupees 26.

12. The total wet assessment as per Jamabandi of Fasli 1286 was Rupees 22,365 with an average rate of Rupees 5-12-9 per acre; by settlement it is Rupees 18,975 with an average of Rupees 4-9-2 an acre, the result being a loss of Rupees 3,390 on single crop.

13. SECOND CROP ASSESSMENT.—Under the head of the second crop charge the assessment as per Jamabandi was Rupees 1,869; by settlement it is Rupees 640, resulting in a loss of Rupees 1,229. Last year the second crop charge at high rates was on 610 acres; in the settlement the ryots have compounded for the second crop charge on 539 acres out of 4,152 acres only in cases where they were pretty sure of the growth of some kind of second crop and where they wanted very much to consolidate the assessment in both the crops. All the anomalous cases in the charging of a second crop were got rid of, and the lands having been charged only with a single crop rate in all cases where the second crop cultivation is not feasible under ordinary circumstances and where the ryots did not choose to compound. Out of the loss of Rupees 1,229 under this head, a large portion may be generally recovered in all favorable seasons from the growth of occasional second crop on one crop lands.

14. DRY LANDS UNDER GOVERNMENT WELLS.—The rates imposed on this description of lands range from Rupees 5 to 2-8-0. More than two-thirds of the area is assessed at Rupees 3-8-0 and 5, the highest class of Rupees 5 having been confined to the highly favored tobacco gardens in ten villages near the highly prosperous towns of Virdupatti and Sivakasi where the tobacco cultivation and trade are remarkable and profitable, and where considerably higher rates hitherto prevailed. The assessment as per Jamabandi of Fasli 1286 was Rupees 6,636 with an average rate of Rupees 3-11-11 per acre; by settlement it is Rupees 6,522 with an average rate of Rupees 3-6-10, resulting in a falling off of Rupees 114.

15. ORDINARY DRY LANDS.—The rates imposed upon these lands range from Rupees 2-8-0 to 4 Annas an acre. More than three-fourths of the area is assessed at Rupees 1 to 2-8-0 per acre. The assessment as per Jamabandi of Fasli 1286 was Rupees 1,67,193 with an average rate of Rupees 1-3-7 an acre or Rupees 1-2-8, excluding Chaturbagam, &c.; by settlement it is Rupees 1,68,926 with an average rate of Rupees 1-2-8 per acre, exhibiting an increase of Rupees 1,733 or Rupees 9,171, excluding the Chaturbagam and fixed remissions creditable to Government, and instituting the comparison with the settlement. For the black soil the average per acre as per Jamabandi was Rupees 1-4-7 or Rupees 1-3-8 excluding fixed remissions; as per settlement the average rate per acre for the soil is Rupees 1-3-9. This is higher than the average rate arrived at in Ottapidaram and is very fair compared with the average obtaining in all the better tracts in the neighboring Zemindaris of Ettiapuram, &c., where the general rate of nearly 1 Rupee per acre for cotton soil prevails. The average rate for red soil was, as per Jamabandi, Annas 13-10 or Annas 13-3 per acre excluding Chaturbagam, &c.; as per settlement it is Annas 12-8 per acre. This is higher than the rate (Annas 6-2) arrived at for similar soil in the Ottapidaram Taluq, and much higher than those imposed on punjab red soil in the lower tracts of the river valley. The red soil, however, is better in this taluq than in those parts.

16. The total dry assessment, including the lands under Government wells, was, as per Jamabandi, Rupees 1,73,829 or Rupees 1,66,391 excluding Chaturbagam, &c., with an average rate

per acre of Rupees 1-4-1 or Rupees 1-3-2 excluding remissions. By settlement it is Rupees 1,75,148, with an average rate of Rupees 1-3-2 per acre, exhibiting an increase of Rupees 1,619 or Rupees 9,057, instituting the comparison after excluding the Chaturbagam, &c., from the Jamabundi side.

17. The total assessment, wet and dry, as per Jamabundi was Rupees 1,98,063 ; by settlement it is Rupees 1,95,063, exhibiting a falling off of Rupees 3,000. Deducting the fixed remissions of Chaturbagam, &c., amounting to Rupees 7,438 from the Jamabundi, and instituting the comparison with the settlement the result is a net increase of Rupees 4,438.* On single crop alone the increase calculated is Rupees 5,669.

18. PALMYRAHS.—Palmyrahs are rather rare in the black cotton country of Sattur. In tracts, however, here and there where principally sandy and gravelly soils prevail, a few scattered trees or small clusters of trees are to be met with. The total number of palmyrahs charged with tax as per Jamabundi was 5,171, with an assessment of Rupees 99. As per settlement the total number charged for including the seedlings was 28,469, with an assessment of Rupees 239, exhibiting an increase of Rupees 140, and leaving 3,869 seedlings yet to be charged. The charge on palmyrahs in the cultivated fields have, for a great part, been consolidated with the land assessment, viz., Rupees 136 on 6,712 out of 8,140 big palmyrahs and Rupees 51 on 20,329 out of 24,198 seedlings. The marginal table will show the particulars of the trees and seedlings on which the consolidated cess has been charged and of those which have not been so dealt with.

Particulars.	PALMYRAHS.				
	Number of Palmyrahs.	Assess-ment in Rupees.	Number of Seedlings.	Assess-ment in Rupees.	Total Assess-ment in Rupees.
<i>As per Settlement.</i>					
Consolidated ..	6,712	136	20,329	51	187
Not consolidated ..	1,428	52	3,869	..	52
Total ..	8,140	188	24,198	51	239
<i>As per Jamabundi ..</i>					
	5,171	99	..	..	99
Difference ..	+ 2,969	89	24,198	51	140

was hardly any big or small tract in this taluq required by the ryots to set apart as pasture ground. The cattle are fed in the Government poramboke in gravelly grounds, jungle streams, or in the occupied fields when the harvest is over. In cultivated parts they are fed on small patches of private occupied fields reserved by the ryots themselves for the purpose in addition to Government poramboke, or are fed by cholum plants called náttús for the sake of fodder.

20. BUILDING SITE.—Much extent was not required at the settlement for building site. Only 9 acres 10 cents, assessed at Rupees 9 in eleven villages, were newly added for the purpose where extension was indispensably needed.

21. DIVISION OF COMMON LANDS.—There have been very few cases of common lands in this taluq that were left undivided which could possibly be divided among the shareholders. In two villages, about 43 acres, held by 72 shareholders, have been divided among them. In 22 others, 337 acres, held by 715 sharers, could not be divided owing especially to the absence of most or many of the shareholders who had gone to Trivandrum and other places on account of the famine. In many of these cases the common lands consist of patches of lands at the foot of the topes and trees held in common and not feasible for sub-division. In no case the whole or a large part of any village is held in common.

22. TRANSFER OF PUTTAHS.—1,192 puttahs have been transferred at the settlement with the consent of the parties concerned.

23. REDEMARCATION.—Redemarcation was effected in all the villages of the taluq with vigor. It has been inspected by the Head Classifiers Muttusami Aiyangar, Ramaseshaiyar and Mahalinga Iyer, and Head Demarcator Subramaiyer in the different divisions in which they conducted work. Muttusami Aiyangar carried on work in 34 villages in the Eastern and Southern Divisions ; Ramaseshaiyar in 34 villages in the Southern, Central, and Northern Divisions ; Mahalinga Iyer in two villages added to the Southern Division from Sankaranainarcoil ; and Subramaiyer in 14 villages in the Northern Division. During the progress of work and afterwards Ramaiyer, the Supervisor, who was entrusted with the supervision of the Sattur Taluq, did inspect the redemarcation generally during his visit to the different tracts. During my tours of inspection to the different villages in the different tracts of the taluq accompanied by the Supervisor or Head Classifiers, I have impressed upon these officers as well as the different officials and the ryots the necessity of properly carrying out this important work and insisted

upon the ryots taking a deep interest in the matter. I have advised the Tahsildar and Revenue Inspectors to co-operate in the matter, who have accordingly complied with my request and done as much as possible to secure the proper attention of the village officials and ryots to the careful imbedding of stones. In cases where there was remissness owing to the absence of ryots on account of the famine, the villagers have at last completed the work for the absentees. During the excessive rain and the consequent high inundations in all the jungle streams and breaches in the tanks, the work of redemarcation that was satisfactorily completed was affected to some extent. In all possible cases, the ryots have replaced the stones again in many instances. The villagers have given receipts to the completion of the work and are responsible for the upkeep of the stones.

24. To summarize the results of the settlement in the Sattur Taluq, the anomalously high rates of assessment in irrigated lands under rain-fed tanks, and on dry lands in inferior tracts adjoining jungle streams impregnated with soda, salt and lime, and on sandy and gravelly tracts have been got rid of, and fairer rates introduced as suited to the country with reference to the circumstances of soil, situation, irrigation, &c. All nominal nunjah lands never cultivated with such crop for a series of years, or such as were lying waste for want of irrigation, being on high level, distant from the source of irrigation, or in excess of the ayacut have on proper inspection and discussion with the ryots been transferred to punjab.

25. Irrigated lands were compounded for as permanent double crop only in cases where the ryots prayed for it, owing to the convenience they commanded, and the rest were left charged only with single crop rates, all nominal charge of second-crop assessment being set aside.

26. The permanent remissions from assessment known locally as Dupatimaniem and Stallamkaval in favor of Monigars and Kavalgars, amounting to Rupees 2,732,* have been brought to the credit of the General Fund for the payment of the Village Establishment.

* Dupatimaniem
Stallamkaval

RS.	441
::	2,291
Total ..	<u>2,732</u>

27. Lands held on favorable terms by privileged classes, Chaturbagam, Ardhamaniem, and Shrotriems, have been brought to full assessment, the amount of those items being Rupees 7,438.

28. The available assets in this taluq for future increase of revenue consist of Rupees 4,560, being the assessment on cultivable waste ascertained at the settlement. It is quite possible that the extent of waste thus calculated will gradually be taken up by the ryots as they are generally anxious to take up and keep in their holdings all available lands in their respective villages, and the probability of their taking them up is more certain from the lighter assessment fixed in waste portions than that prevail generally on the newly cultivated lands.

29. For the speedy and successful completion of my settlement work in this taluq in the difficult times of the unparalleled famine and the subsequent heavy rains which in no small degree tended to retard progress, I am much indebted to the kind and cordial co-operation of M. R. Ry. Subbaraya Aiyer Avergal, General Charge Deputy Collector, who, in the midst of the multifarious calls by press of business from all departments, has rendered me much assistance by giving a large share of his attention to my requirements, and issuing prompt orders to the Tahsildars to secure every facility for the progress of settlement.

30. I have despatched the diglott registers and descriptive memoirs with eye-sketches of all the villages in the taluq.

† 1. The Eastern or Nemmeni Division.
2. The Southern or Kovilpatti Division.
3. The Central or Sattur Division.
4. The Northern or Virudupatti Division.

31. I beg to submit herewith a final taluq map showing the irrigation, &c., and four scroll maps for the four divisions into which the taluq is divided† to show the mode of classification and assessment pursued in different villages in the taluq.

WITH the foregoing letter the Director of Revenue Settlement submits his Special Assistant's report on the settlement of the Sattur Taluq, to which the table of rates, adopted for the rest of the district, has been applied under the sanction conveyed in G.O., dated 22nd May 1877, No. 1,779.

2. The taluq formerly contained seventy-one villages; the net result of Sub-division transfer, &c., is an increase of thirteen. The soil is chiefly black loam both in the dry and irrigated lands; the garden lands are especially good. The irrigated area is small, amounting to only 4,152 acres, out of a total of 146,805; the sources of supply are rain-fed tanks, and the villages have all been placed in the fourth group.

3. The revised assessment and area by survey are shown in comparison with the old area and assessment in the subjoined abstract :—

	AREA.		ASSESSMENT.		DIFFERENCE.	
	By Pymash.	By Survey.	As per Jamabundi of Fasli 1286.	Revised.	Extent.	Assessment.
River-irrigated ...	ACRES. 1,094	ACRES. 1,157	RS. 5,637	RS. 5,183	ACRES. + 63	RS. — 454
Rain-fed ...	2,730	2,962	18,561	14,372	+ 232	— 4,189
Baling ...	32	33	36	60	+ 1	+ 24
Total Wet ...	3,856	4,152	24,234	19,615	+ 296	— 4,619
Well lands ...	1,772	1,902	6,636	6,522	+ 130	— 114
Ordinary Dry ...	136,785	144,903	1,67,193	1,68,926	+ 8,118	+ 1,733
Total Dry ...	138,557	146,805	1,73,829	1,75,448	+ 8,248	+ 1,619
Grand Total ...	142,413	150,957	1,98,063	1,95,063	+ 8,544	— 3,000

4. The increase in the area by survey is just 6 per cent. ; the assessment has been reduced by Rupees 3,000 ; but to arrive at the financial results of the settlement, the fixed remissions (Rupees 7,438), which will henceforth cease, must first be deducted from the Jamabundi demand and the result will then be a gain of Rupees 4,438, or about $2\frac{1}{4}$ per cent. The average settlement rates compare with those previously existing as marginally shown. The wet rates range from Rupees $7\frac{1}{2}$, including second-crop charge, to Rupees 3 per acre, and the dry from Rupees 5 for the best garden lands to 4 Annas for the poorest soils. The second-crop charge has been compounded for at one-fourth the first-crop charge on 539 of the 610 acres cultivated with a second crop last year.

—	Jamabundi	Settlement.	
Wet—			
River-irrigated ...	RS. A. P. 5 2 2	RS. A. P. 4 7 8	
Rain-fed ...	6 2 0	4 10 2	
Dry—			
Garden ...	3 11 11	3 6 10	
Ordinary ...	1 3 7	1 2 8	

5. The palmyrah revenue is trifling; under the usual method of settlement Rupees 239 will be realized, an increase of Rupees 140 over the former demand. The assessment on the cultivable waste amounts to only Rupees 4,560.

6. The settlement appears to the Board satisfactory, and they recommend that it be confirmed.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

To the Secretary to Government, Revenue Department.

Copy to the Collector of Tinnevelly.
to the Director of Revenue Settlement.

Exd. W. H. French.

1878.

Gazette of Government
MADRAS.

PROCEEDINGS, 1ST MARCH 1878, NO. 563.

Encl.



Received

M A R C H .

No. 563.

Settlement—of Sattur Taluk, Tinnevelly District.—Reviewing report on the —, and recommending that it be confirmed.

STATEMENT showing a Comparison between Old and New Assessment on occupied Government lands in the undermentioned Taluks of the Tinnevelly District.



PROCEEDINGS OF THE BOARD OF REVENUE, dated 21st June 1878.

Read the following letter from R. K. PUCKLE, Esq., Director of Revenue Settlement, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Kovilpatti, 25th March 1878, No. 773-24 :—

I HAVE the honor to forward herewith reports from the Special Assistant and Additional Sub-Collector on the settlement of Sankaranainarkovil and Strivilliputhur, the two last taluqs of the Tinnevelly District.

2. **SANKARANAINARKOVIL.**—This taluq, which was settled by Special Assistant Vencatachariar, formerly comprised forty villages, but by interchange with adjoining taluqs to secure a better boundary, and by the sub-division of some very large villages, the number is now raised to 58, and these aggregate 276 square miles, or 176,952 acres. Besides these, the Zemindaries of Shivagiri, Avadiyapuram, Naduvakurichi, Talavankotti and parts of the Zemindaries of Uttamalei and Etiapuram and many minor proprietary estates lie in this taluq.

3. This taluq is mostly poor and the irrigation is very indifferent. At the foot of the western mountains dividing Tinnevelly from Travancore some few villages are fairly supplied by streams from the hills, but the centre and south of the taluq is a high level gravelly plain, on which very little will grow; the assessment, however, as in Nanguneri was high, good and bad lands being charged alike, and in some cases the area under small rain-fed tanks was charged as high as Rupees 8-12-0 an acre; the average remission for the last ten years has been Rupees 39,397.

4. For some years prior to settlement, I had done my best in this taluq to get rid of anomalies, the second crop charge on garden land was remitted, the second crop charge on wet lands was confined to the area cultivated, and large tracts of waste land held on putta to keep out professional Durkhastdars were allowed to be kept waste free of charge till the settlement; in this way much was done before the settlement was made, and the revision now effected is merely a revision of rates and results in an increase of Rupees 1,387; this gain is solely attributable to charging full assessment on lands hitherto held on favorable terms by certain privileged classes.

5. The irrigated villages were placed in the third group under minor rivers, and in the fourth group under rain-fed tanks; the average wet land assessment is now Rupees 5-4-1 in the former and in the latter Rupees 4-7-9 an acre as compared with Rupees 5-12-9 and Rupees 5-2-1 formerly; the settlement rates range from Rupees 2 to Rupees 7-8-0 an acre, and, as in Nanguneri, the greater area falls under the Rupees 6, Rupees 4-8-0, and Rupees 3-8-0 rates, giving a total for the taluq of Rupees 4-15-11, which is about the Trichinopoly District average; by this revision of rates for wet land there is a net loss of Rupees 4,784 on 13,704 acres, or about Annas 6 an acre.

6. The second crop charge last year was anomalous, as a special concession dry crops were allowed to be grown on 3,545 acres of irrigated land at a charge of Rupee 1 an acre; the Curnams, however, instead of charging Rupee 1, brought the full second crop charge to account, and then remitted the difference between that and Rupee 1; thus the accounts show the second crop demand last year to have been Rupees 9,681, though the actual collection was but Rupees 3,545. I have, therefore, rejected all this and have taken for comparison the former assessment of the area now compounded as second crop.

7. The ryots have now compounded the second crop charge on 1,078 acres at one-third and one-fourth additional to the single crop assessment. This gives Rupees, 1,295, and the second crop charge on such a portion of the same area as was cultivated with a second crop last year was Rupees 1,264, so there is a net increase by compounding of Rupees 31.

8. The wells in this taluq are poor, and the lands under Government wells have been assessed at Rupees 2-8-0 an acre, except in a village transferred from Sattur, where the rich tobacco lands are assessed at Rupees 5 an acre; by this treatment of Government well lands there is an increase of Rupees 1,630.

9. The dry lands to the north-east of the taluq are usually black loam, and those in the centre and south of the taluq are mostly red sand; 1,055 acres are assessed at Rupees 2-8-0 and 21,679 acres at Rupees 1-8-0 an acre; the remaining 9,014 acres are assessed at from Rupee 1 to Annas 4 an acre; the average formerly was Annas 12 Pies 9 an acre; by settlement it is now Annas 12 Pies 8 an acre. Though the average is somewhat less the increase on dry land by settlement is Rupees 5,353 on account of the larger area charged for.

10. The chaturbogam and shrotriem deductions were formerly Rupees 5,959 in favor of Brahmin cultivators; all lands are now charged full rates of assessment, and this deduction has ceased to exist.

11. There are very few palmyras here; 99,299 have been brought to account at settlement and charged with Rupees 1,149 against Rupees 787 formerly; of these the charge on 73,854 has been compounded for Rupees 491, the charge on the remainder is Rupees 658 per annum, and there yet remain 12,944 seedlings to be charged for as they come to maturity.

12. In a taluq with such extensive plains and with the ghaut mountains adjoining, grazing ground was only applied for in one village where 345 acres were set aside for this purpose.

Thirty-five acres have been added to building sites.

One hundred and twenty-two acres of common lands have been divided in three villages, but the sharing system still exists in eleven villages.

Two thousand two hundred and fifty-three puttus were changed with the consent of the parties concerned.

13. The opportunity of making the settlement was taken advantage of to dispose of the only boundary dispute outstanding in the district, the particulars of which are given in the accompanying memorandum.

14. This is the fifth taluq of Tinnevelly that Special Assistant Venkatachariar has settled, and the completion of the district sooner than contemplated in the enclosure of G.O., No. 1,779, dated 22nd May 1877, is mainly due to his exertions.

15. STRIVILLIPUTHUR.—This taluq was settled by the Additional Sub-Collector Mr. Arundel, and is the last in the Tinnevelly District. With this all nine taluqs are settled, and the work has been completed well within the date estimated by me in the enclosure mentioned above. There were formerly 135 ryotwari villages in this taluq, of which seventy-one were uninhabited, or only inhabited by pullers or other agricultural laborers. These have been merged in the settlement at the request of the Puttadars concerned, and there thus remain ninety villages including the Sub-divisions of some large villages, and one village left out of the settlement; this was believed to be Inam at survey, but it contains some Government land. The Superintendent of Revenue Survey has been requested to have this surveyed, and when this is done the new rates can be applied by the Collector.

16. This taluq is fairly well off. At the foot of the hills the soil is deep, and the hill streams furnish a fair supply of water, and on the south-western frontier there are some rich villages which grow fine crops of tobacco, and throughout the taluq generally the dry crops are above the average.

17. The total ryotwari area is 387 square miles or 248,018 acres ; of this 20,902 acres are irrigated by minor rivers and 1,076 acres by rain-fed tanks. These have all been placed in the third group with the exception of one village placed in the fourth group and settled as belonging to Sattur, though subsequently transferred to Strivilliputhur.

18. The aggregate single crop assessment of the irrigated area last year was Rupees 1,32,436, by settlement it is Rupees 1,27,637, decrease Rupees 4,799, the average settlement rates are Rupees 5-15-0 for river-fed lands and Rupees 4-12-9 for those under rain-fed tanks as compared with Rupees 6-9-7 and Rupees 5-10-10 formerly ; the reduction on lands under rain-fed tanks was needed as some were much overrated.

19. The average for single crop irrigated land in each taluq is now as under :—

Taluqs.	River-irrigated.	Rain-fed.	Total Average.
	RS. A. P.	RS. A. P.	RS. A. P.
1. Tenkasi	5 5 0	3 13 8	5 4 3
2. Ambasamudram	8 6 8	3 10 10	7 1 10
3. Tinnevelly	7 9 8	4 4 8	7 5 3
4. Tenkarai	8 4 2	4 9 7	7 15 5
5. Nanguneri	7 2 5	5 5 5	6 11 11
6. Ottapidaram	5 9 9	3 15 0	4 4 2
7. Sattur	4 7 8	4 10 2	4 9 6
8. Sankaranainarkovil	5 4 1	4 7 9	4 15 1
9. Strivilliputhur	5 15 0	4 12 9	5 12 1

20. The second crop charge has been compounded on 4,730 acres at one-fourth additional to the single crop charge ; formerly the charge on this area was Rupees 2,404 as only some of the lands were cultivated, but by settlement it is Rupees 5,173 ; net increase Rupees 2,769.

21. There is still a large area left uncompounded, and this will be charged as usual when an occasional second crop is grown ; the second crop charge on this was Rupees 8,415 last year.

22. In drawing his comparison, Mr. Arundel has, however, included the entire second crop charge in the revenue assets of last year ; the settlement has nothing to do with the charge on the area that has not now been compounded for, and a sum of Rupees 8,415, the charge for occasional second crop, should therefore be deducted from the revenue assets.

23. Three small ponds were made over to the ryots with the land under them for a fixed charge of Rupees 58 for 25 acres.

24. The lands supplied by Government wells have been charged at Rupees 3-8-0 and Rupees 2-8-0 an acre. There are 6,783 acres of such lands, and the increase by settlement amounts to Rupees 6,160.

25. Twelve thousand one hundred and seventy acres of dry land have been assessed at Rupees 2-8-0 an acre, of which about 8,000 acres lie in the rich village of Wataraya Irupu, which formerly paid an annual assessment of Rupees 60,000, but has now been divided into four villages ; 45,144 acres are assessed at Rupees 1-8-0 an acre, and the remaining 92,359 acres are assessed at from Rupee 1 to Annas 6 an acre. The average for the dry land of this taluq is Rupees 1-3-3 an acre excluding garden, and this is higher than in any other taluq in the district. There is, however, a decrease by settlement of Rupees 3,525.

26. Two hundred and nineteen thousand nine hundred and seventy-two palmyras were formerly charged Rupees 4,376 per annum ; of these the charge on 112,895 has been compounded at Rupees 2,091, which, with the charge on the remainder, gives an increase by settlement of Rupees 307.

27. Pasturage to the extent of 520 acres has been set aside in two villages; but with the ghaut mountains close by, the people usually have plenty of grazing.

28. Fifty-six acres have been added to building sites, 1,666 acres of common land have been divided in ten villages, but the sharing system still exists in twenty-six villages; 3,230 puttas were changed with the consent of the parties concerned, and the percentage deductions known as chaturbogam and shrotriem in favor of privileged classes, amounting to Rupees 6,556, have been resumed.

29. On the whole the net increase by settlement is Rupees 12,122. The ready-money allowances mentioned in paragraph 33 of Mr. Arundel's letter should, I conclude, be continued.

30. The redemarcation of this taluq has not as yet been completed; and as I am anxious to withdraw all hands by the end of the official year, I propose leaving this taluq in its present condition as the demarcation was at first fairly well done; a great number of the stones have since been revised, and the survey maps and settlement registers now show the fields sufficiently well.

31. In the latter paragraphs of his letter Mr. Arundel gives an interesting account of the progress that he was able to make with some local works during the settlement; he endeavored to turn to account the great opportunity offered, but time was pressing, and he was unable to do as much as he effected in Ambasamudram, the other taluq that he settled. Unfortunately I was deprived of his services for upwards of two years while this district was under settlement, but during the time that we have worked together he has rendered me great assistance, and he is thoroughly well acquainted with all the details of making a settlement.

32. My thanks are due to the Revenue Officers of the district for the aid that they have so readily furnished.

33. I have reviewed the method of working and the results of the settlement of the entire district in a memorandum that accompanies this.

ENCLOSURE No. 1.

From T. VENCATACHARIAR, Special Assistant to Collector of Revenue Settlement, Tinnevelly, to R. K. PUCKLE, Esq., Director of Revenue Settlement, dated Kovilpatti, 9th March 1878, No. 16.

I HAVE the honor to submit a report of the Revenue Settlement of Sankaranainarkovil Taluq.

Total number of villages as per Jamabandi	40	2. The taluq contained prior to settlement forty villages as per Jamabandi; but by transfer of villages from this taluq to Ottapidaram and Sattur and <i>vice versa</i> and by the sub-division of big villages into two or more as particularized in the margin, it now contains fifty-eight villages, consisting of 176,952 acres or 276 square miles.
Deduct transfer to { Ottapidaram 2 }	4	
Sattur 2		
Remainder ...	36	
Add increase by transfer from Ottapidaram	2	
Increase by sub-division	28	
Do. of big villages	20	
Total as per Settlement ...	58	

3. IRRIGATION.—This taluq is irrigated partly by minor rivers from the Vasudevanullur and Puliyankudi hills forming tributaries of the Vaipar river, and partly by rain-fed tanks, in some cases aided by minor jungle streams or by drainage from the upper fields. On the whole the irrigation in this taluq is generally poor, the rain-fed tanks suffering for want of proper supply and receiving constant remission on account of waste and withered crops. Even the more favored tracts adjoining the hills under the minor streams are poor as compared with similar tracts under similar sources of supply in the taluqs north and south, and though these tracts are better irrigated than those under rain-fed tanks, yet they suffer from a deficient supply of water.

4. GROUPING OF VILLAGES.—The villages irrigated by the minor rivers are placed in the third group for settlement purposes, and those irrigated by rain-fed tanks are placed in the fourth. There are thirty villages in the third group and twenty-three villages in the fourth group, and five are dry villages.

5. CLASSIFICATION OF SOIL.—The soil is red loam and sand and black loam and sand. In the river-irrigated tract the soil is black loam to the extent of a little more than one-third, and the rest is chiefly red loam. Under the rain-fed tanks the soil is mostly red loam, black loam and red sand being scarce. Under the head of dry, about one-third is black loam in the northern and eastern parts of the taluq, and the rest is mostly red sand. The following table exhibits the area of the several soils:—

Irrigation.	Group.	WET OR IRRIGATED.			DRY.				
		Classification.		Total Area in Acres.	Classification.		Total Area in Acres.		
		Class.	Sort.		Class.	Sort.			
River-irrigated	3rd	4	2	881	2	1	11		
		4	3	1,119	2	3	2,998		
		4	4	1,583	4	1	1,055		
		4	5	416	4	2	21,545		
		5	4	84	4	3	13,561		
		7	1	862	4	4	3,256		
		7	2	1,795	4	5	499		
		7	3	1,850	5	2	151		
		7	4	845	5	3	475		
		8	1	1	5	4	242		
		8	2	4	7	1	134		
		8	3	51	7	2	2,998		
Rain-fed	3rd				7	3	4,443		
					7	4	4,153		
					7	5	357		
		4	4	68	8	1	1,845		
		4	5	6	8	2	10,147		
		7	2	248	8	3	12,991		
		7	3	816	8	4	38,418		
		7	4	291	8	5	1,558		
		8	3	24					
					1,453				
Rain-fed	4th	4	2	112					
		4	3	835					
		4	4	65					
		4	5	4					
		7	1	437					
		7	2	1,305					
		7	3	640					
		7	4	130					
		8	1	66					
		8	2	65					
		8	3	4					
		8	4	21					
Total Irrigated	Baling	8	5	15					
					3,099				
					4,552				
		Total Wet ...		13,448					
		Baling ...		256	Total Dry ...	115,852			

6. The assessment arrived at on the irrigated and dry lands of the taluq are shown under each money-rate now imposed in juxtaposition with the assessment that has hitherto prevailed.

Wet or Irrigated.

A PER SETTLEMENT.

AS PER JAMABANDI.

LITERATURE.

7	8	2	8	10	0	33	247	81	398	33	183	5	8	4			
7	7	7	8	7	8	1,210	9,078	...	9,078	1,227	1,392	9,619	6	15	1		
6	0	1	8	7	8	1,932	309	1,541	1,197	1,095	235	1,330	5	0	11		
6	0	1	8	7	8	21,041	...	21,041	21,949	2,086	24,635	24,635	6	4	7		
6	0	1	8	6	0	8,597	...	612	3,957	564	2,715	712	8,427	6	1	4	
4	8	1	2	5	10	5,62	2,435	...	24,484	5,154	27,473	3,238	30,721	5	5	3	
4	8	1	2	4	8	5,440	24,494	...	1,344	290	1,441	194	1,605	4	13	10	
3	8	0	14	4	6	807	1,076	268	...	1,996	1,824	8,298	1,067	9,365	4	8	10
3	8	0	14	3	8	6,938	6,938	...	517	160	618	18	636	6	13	10	
3	8	0	14	3	0	1,172	517	...	...	19	81	6	87	4	4	2
2	8	0	14	2	8	21	52	...	...	12	53	...	53	4	6	8
2	0	0	14	2	0	15	31	...	...	...	...	...	...	+	555	- 4,885
Total Irrigated ...				13,448	67,185	1,270	68,455	4 15 11	12,893	72,070	9,591	81,661	5	9	6		
Baling ...				256	548	25	573	2 2 3	224	447	90	537	1	15	11		
Total Wet ...				13,704	67,733	1,295	69,028	4 15 1	13,117	72,511	79,481	82,198	6	8	5		
													+	32	+	101	
													+	587	+	4,784	

Total.

Dry.

Rate per Acre.	As per Settlement.			As per Jamabandi.			Difference.	
	Extent.	Assessment.	Average.	Extent.	Assess- ment.	Average.	Extent.	Assess- ment,
	1	2	3	4	5	6	7	8
RS. A. 5 0	ACRES 2,993	RS. 7,464	RS. 56	RS. A. P. 2,828	RS. 5,819	RS. 71	RS. 7 3	
2 8	1,055	2,637		974	2,255	2 1 0		
2 8	21,679	82,540		20,383	82,600	2 5 1		
1 8	18,399	18,399		17,252	19,148	1 1 9		
0 12	17,997	19,509		17,162	14,126	0 13 2		
■ 8	18,118	9,067		17,523	9,427	0 8 7		
0 6	34,042	12,778		32,926	18,581	0 6 7		
■ 4	1,558	390		1,267	329	0 4 ■		
Total Dry...	115,852	96,840	0 13 4	110,325	97,446	0 14 1	+5,527	- 606
Total Wet and Dry	129,556	1,65,868	...	123,442	1,79,644	...	+6,114	- 13,776
1st Crop ..	...	1,64,573	...	...	1,69,963	...	...	- 5,390
Deduct Chatur- bogum, &c...	...	...	...	...	-5,959	...	...	+ 5,959
Remainder ...	...	1,64,573	...	...	1,64,004	...	...	+ 509
2nd Crop ...	...	1,293	...	...	9,681	...	...	- 8,386
								- 7,817

7. From the above the following result will be gathered.

8. LANDS IRRIGATED BY MINOR RIVERS.—The rates imposed on this tract range from Rupees 7-8-0 to 3 for single crop. A little less than half the area in this tract is rated at Rupees 6 and upwards an acre. The settlement of this tract exhibits a decrease of Rupees 2,817, or about 6 per cent. on single crop. The settlement average per acre is Rupees 5-4-1, while the Jamabandi average was Rupees 5-12-9. This average is higher than that imposed on lands in similar groups in Tenkasi and Tinnevelly. Hitherto the same average rate was imposed on all lands in the villages, good and bad, river-irrigated or rain-fed; but in the settlement proper distinctions have been made in the treatment of lands, good and bad, river-irrigated and rain-fed, with reference to their position, quality and irrigation. The former rate on poorer lands was enormously high in many villages as in Nanguneri, so much so that it ranged up to Rupees 8-12-0 per acre even on the worst lands.

9. RAIN-FED TANKS.—The rates now imposed upon the area under rain-fed tanks range from Rupees 2 to 6 an acre for a single crop. More than three-fourths of the area is assessed at Rupees 4-8-0 and 6. The assessment as per Jamabandi was Rupees 22,480 with the high average rate of Rupees 5-2-11 an acre, by settlement it is Rupees 20,412 with an average rate of Rupees 4-7-9 an acre, resulting in a loss of Rupees 2,068. The rates that have hitherto prevailed on rain-fed tanks in this taluk were also high, Rupees 8-12-0 in some cases as in the river-irrigated tracts. The average rate arrived at in the settlement is fair and rather strict as in Sattur, being higher than that obtained in Tenkasi, Tinnevelly, Ambasamudram, and Ottapidaram for rain-fed tanks, though a little less than that arrived at in Nanguneri, Tenkarai and Sattur. The rain-fed tanks in this taluk are very inferior. The lands under them are generally very poor, being impregnated with soda and lime and subject to sand silt in high winds. Excepting in very favorable years, the tanks seldom hold water enough for the growth of a full nunjah crop. Even in ordinary years the crops suffer and become withered, or the lands lie waste. In many cases the ryots resort to the cultivation of punjab crops, such as samai, tenai, ragi, cumbu, and cotton. That this taluk has been groaning under a heavy burden hitherto and has been specially suffering with drought like the southern parts of Nanguneri is notorious. The present settlement relieves the ryots of much of the burden by the reasonable rates now imposed, and the loss that is apparent is inevitable.

10. LANDS SUPPLIED BY BALING.—There is not much baling in this taluk, and what exists has in every case been assessed at half the assessment of the block in which it is situated. The assessment as per Jamabandi was Rupees 447 with an average rate of Rupees 1-15-11 an acre, by settlement it is Rupees 548 with an average of Rupees 2-2-3 per acre, resulting in an increase of Rupees 101.

11. The total wet assessment as per Jamabandi of Fasli 1286 was Rupees 72,517 with an average rate of Rupees 5-8-5 per acre, by settlement it is Rupees 67,733, showing a loss of Rupees 4,784 on single crop.

12. SECOND CROP ASSESSMENT.—Under the head of the second crop charge the assessment as per Jamabandi was Rupees 9,681, by settlement it is Rupees 1,295, resulting in an apparent loss of Rupees 8,386. This loss is only nominal as the actual amount derived from second crop is not shown in the comparison. Last year 3,545 acres were allowed to be cultivated with dry crops at 1 Rupee an acre, but the full second crop charge of Rupees 9,601 was entered in the accounts, and the difference between that and Rupees 3,545 was deducted as a remission; hence the Jamabandi accounts are swollen by Rupees 6,136 of merely nominal charge. Since the systematic Jamabandi made by you in the taluk between Fasli 1277 and 1281 when you got rid of almost the whole of the anomalies and the oppressive permanent double crop charge, the ryots have been charged with a second crop rate only on lands that are cultivated with a second crop and remissions are granted when needed, the oppressive charge of a fictitious permanent double crop rate having been forgotten by the inhabitants. Since Fasli 1281 when this arrangement seems to have been fully carried out, the annual attempt at a second crop cultivation is generally between 600 and 1,600 acres. In the settlement the ryots have compounded for the second crop charge on acres 1,087 out of 13,704 acres of irrigated land. They have done so only in cases where they are pretty sure of the growth of some kind of second crop and where they wanted very much to consolidate the assessment from the apparent facilities for such cultivation. The charge on this for second crop alone comes to Rupees 1,295, while the Jamabandi second crop charge on the corresponding extent was only Rupees 1,264, exhibiting an increase by settlement of Rupees 31, if the special cultivation of dry crops on irrigated land last year be excluded.

13. DRY LANDS UNDER GOVERNMENT WELLS.—The general rate of Rupees 2-8-0 per acre has been adopted on this description of land. The highest rate of Rupees 5 being imposed only on 11 acres of first-rate tobacco garden on the Sattur frontier; and even with that rate there is a loss of revenue on the area so charged. The garden assessment as per Jamabandi of Fasli 1286 was Rupees 5,890 with a low average rate of Rupees 2-1-2 per acre, by settlement it is Rupees 7,520 with an average rate of Rupees 2-8-1 per acre, resulting in an increase of Rupees 1,630. This increase cannot be avoided as the lowest rate has been imposed except in the instance noted above.

14. ORDINARY DRY LANDS.—The rates imposed upon these lands range from Rupees 2-8-0 to Annas 4. The assessment as per Jamabandi of Faali 1286 was Rupees 91,556 with an average rate of Rupees 0-13-7 an acre, or Rupees 0-12-9 excluding fixed remissions of chaturbogam and shrotriem, by settlement it is Rupees 89,220 with an average rate of Rupees 0-12-8, exhibiting a decrease of 2,336 on the full assessment; deducting chaturbogam and shrotriem however from the Jamabandi figures there is an increase by settlement of Rupees 5,353, the fixed remissions in favor of privileged classes being Rupees 5,959. The dry lands in this taluk are generally poorer than those in northern and eastern taluqs, especially those on the sandy plains ranging over a larger portion of the taluk in the centre, south, and south-east, and the former rates were certainly high on this admittedly poorer taluk which is similar to the sandy plains of the Nanguneri Taluk, and the apparent loss on ordinary dry lands alone is nothing but reasonable.

15. The total assessment, wet and dry, as per Jamabandi exclusive of fixed remissions credited to Government and the nominal charge of second crop assessment on lands specially cultivated with punjab crop temporarily only during last year was Rupees 1,65,268, by settlement it was Rupees 1,65,868, exhibiting an increase of Rupees 600.

16. PALMYRAS.—Palmyras are rather rare in this taluk excepting in some tracts here and there sparingly and in villages adjoining the hills. The total number of palmyras charged with tax as per Jamabandi was 46,025 trees charged with an assessment of Rupees 362. At settlement the total number charged for including the seedlings was 99,299 with an assessment of Rupees 1,149, exhibiting an increase of Rupees 787, and leaving 12,944 seedlings yet to be charged. The charge on palmyras in the cultivated fields has for the greater part been consolidated with the land assessment, viz., Rupees 406 on 39,695 out of 65,140 big palmyras and Rupees 85 on 34,159 out of 47,103 seedlings. The subjoined table exhibits the particulars of the trees and seedlings on which the consolidated cess has been charged and of those which have not yet been consolidated :—

PALMYRAS.

Particulars.	Number of Big Palmyras.	Assessment in Rupees	Number of Seedlings.	Assessment in Rupees.	Total Assessment in Rupees.
<i>As per Settlement.</i>					
Consolidated ...	39,695	406	34,159	85	491
Not consolidated ...	25,445	658	12,944	...	658
Total ...	65,140	1,064	47,103	85	1,149
As per Jamabandi ...	46,025	362	...	...	362
Difference ...	19,115	702	47,103	85	778

17. PASTURAGE.—There is hardly any necessity for setting apart grazing ground in this taluq. In one village 345 acres of unassessed waste was required by the ryots to be set aside for the purpose. There is a sufficiency of pasture for the cattle on the hills and in the Government poramboke, gravelly mounds, jungle streams, or in the occupied fields when the harvest is over. Some of the ryots reserve a portion of their lands for pasturage, or grow green fodder.

18. BUILDING SITE.—With reference to the requirements of ryots 35 acres of occupied land, assessed at Rupees 41, were newly added for the purpose of building site in 23 villages in cases where such extension was indispensably needed.

19. DIVISION OF COMMON LANDS.—Common lands were divided in three villages to the extent of 122 acres among 59 shareholders. In eleven other villages there exist common lands to the extent of 386 acres among 570 shareholders. These consist mostly of lands under topes and trees, partly impossible for sub-division and partly undivided owing to the absence of a large number of shareholders on account of famine.

TRANSFER OF PUTTAS.—Two thousand two hundred and fifty-three puttas were transferred at the settlement with the consent of the parties concerned.

20. REDEMARCTION.—Redemarcation was effected in almost all the villages of the taluq, and stones strongly imbedded by being sunk to the level of the ground in all possible cases, though in some big villages adjoining the hills and in the high sandy plains in the southern parts, the work of sinking to the level of the ground is some incomplete owing to the absence of ryots on account of famine and other reasonable causes. The village officers are, however, doing their best under the strict orders of the Tahsildar to get this small amount of work completed soon. There are, however, stones on the ground in most cases and strongly imbedded too. It is only sinking to the level of the ground that requires to be attended to by the village officers through the ryots or through their totties in the lands of absentee ryots and poramboke. This taluq was already well redemarcated once before under the superintendence of Mr. Symonds. The work of final redemarcation was inspected by Arunagiri Moodelliar and Mahalingam Aiyar who had charge of the taluq in two divisions. I have in conjunction with these officers and the Tahsildar inspected the work in many villages and parts of villages. Sufficient warning was made to the village officers and ryots to keep the stones properly imbedded to the level of the ground, and the advantage of preserving them were fully impressed on their minds. During the excessive rain and the consequent high inundations in all the jungle streams and breaches in the tanks, the work of redemarcation that was satisfactorily completed was affected to some extent. In all possible cases the ryots have replaced the stones. The village officers have given receipts and are responsible for the upkeep of the stones. The long-standing boundary dispute between the Uttamalai Zemindari and the Government villages of Sayamalai and Achampatti, Mela and Kila Nilidanallur and Vannikonandal and the claims of the Zemindar on parts of them adjoining his Zemindari as villages or hamlet included in the Sanad Milkiat Istimirar and wrongfully added to the Government village by the Curnams and Amans during the management of the Zemin by Government were gone through fully both by Mr. Symonds when he was in charge of the classification of the taluq and by me during this final settlement, and was finally disposed of by you in your Proceedings of the 5th instant in which the case is fully set forth. The claims were for 7,564 acres of land on the border of his Zemindari, consisting of 7,006 acres of cultivated, 272 acres of cultivable waste, and 287 acres of poramboke. The assessment of the cultivated area was Rupees 2,848 and the Government puttias held by 550 ryots mostly belonging to the Zemindar. The entire area claimed having been adjudged to the Zemindar has been excluded from the accounts in due course, and the necessary alterations have been made in the plans and other documents.

21. To summarize the results of the settlement of the Sankaranainarkovil Taluq, excluding from the comparison the assessment of the area now adjudged to the Uttamalai Zemindar and the special assessment of the irrigated area cultivated with a dry crop last year and including the increase in the palmyra cess shows an increase of Rupees 1,387.

22. The available assets in this taluq for future increase of revenue consist of Rupees 3,500, being the assessment on cultivable waste ascertained at the settlement. It is quite possible that most of this area will gradually come to cultivation in favorable years. There is enough room for improvement of the resources of wet cultivation in the western parts of the taluq and securing a reasonable addition to the revenue.

23. The ryots of Sankananainarkovil and other villages have a great thirst for the completion of the Tonikal channel already attempted at their own private contribution. They are very anxious to contribute largely for the work which they trust may be successfully carried out from their contributions aided by Government. This and other works of utility on the minor river, both below and on the hills, may effect immense good to the ryots and Government by developing the resources of the country to a proper extent. The ryots of this taluq are anxious to have improvements effected, not only to the cultivation resources, but also to the means of communication and buildings of public utility. Many of them have already come forward to request the Deputy Collector and Tahsildar to help them in this respect promising to contribute towards securing this highly desirable object at an early date, fully alive to the inconvenience of

immediate provisions from the Local Fund to any tangible extent. They have evinced this desire by their contribution towards a road from Kalngugumalai to Vasudevanallur *via* Sankaranainarkovil and a chutram at Vasudevanallur which have long been very much wanted for public convenience. These desirable works are being arranged for and carried out pretty vigorously by the exertions of the Deputy Collector and under the orders of the Collector, who has provided help from available Local Funds also, and they will no doubt prove of immense value to the country. In a more favorable year the ryots are sure to come forward for the more costly improvements calculated to develop the resources of their irrigation, such as the completion of the excavation of the Tonukal channel, for which they have been exerting themselves for a long series of years. The ryots of this taluq deserve the most favorable consideration for improvement of irrigation in all possible manner as they are suffering for want of proper resources of water-supply.

24. For the speedy and successful completion of my settlement work in this taluq as in Sattur in the difficult times of unparalleled famine and the subsequent heavy rains which injured the existing sources of irrigation and in no small degree tended to retard the progress of settlement, I am much indebted to M.R.Ly. H. Subbaraya Aiyar Avergal, the General Charge Deputy Collector for his kind and cordial assistance he rendered all along so as to secure all means of a prompt completion of my work. I have also to bring to your notice the cordial and energetic exertions of the Tahsildar, Srinivasa Aiyangar, in co-operating with the Head Classifiers in effecting a speedy completion of this taluq which was full of difficult questions that remained to be disposed of at the settlement. With the prompt attention he paid to my instructions during the progress of the settlement work and the intimate acquaintance of the different parts of the taluq and the habits, manners, and wants of the people he had acquired by visiting every part of the taluq, he proved of valuable assistance during my hearing of appeals in making the final settlement as complete as possible.

25. The exertions of Arunagiri Moodelliar and Mahalingam Aiyar, the able and long experienced Head Classifiers of the department, and the manner in which they worked energetically to complete the taluq successfully are highly commendable.

26. I beg to submit herewith a final taluq map showing the irrigation and other topographical features in a convenient form and three scroll maps exhibiting the mode of classification and assessment pursued in the different villages of the taluq.

ENCLOSURE No. 2.

From A. T. ARUNDEL, Esq., Additional Sub-Collector of Tinnevelly, to R. K. PUCKLE, Esq., Director of Revenue Settlement, dated Kovilputti, 18th March 1878, No. 54.

I HAVE the honor to report on the settlement of the taluq of Strivilliputtur with which the settlement of the whole of the Tinnevelly District is brought to a conclusion. The field establishment began work in the month of October, shortly before my return from furlough, and the settlement of the taluq has thus taken between five and six months.

2. The whole taluq formerly contained by Jamabandi 139 villages, of which 4 were transferred to the Sattur Taluq, leaving 135. Three villages were added from Sattur, making 138. Seventy-one villages uninhabited or inhabited only by the puttadars' laborers were amalgamated, leaving 67, which were increased to 89 by sub-division. This statement, though necessary to render the report complete, is somewhat misleading, and the changes will be better understood by taking the villages as they were by survey. By survey then there were 135 villages, of which 4 were transferred to Sattur, leaving 131. Three were transferred from Sattur, making 134. These were by amalgamation reduced to 83 and the sub-division of 4 of these raised the total number to 89, on which number the whole of the settlement is based. As explained in my letter, No. 295, dated 22nd December 1877, the amalgamations were effected in conformity with G.O., No. 360, dated 5th March 1875. The area of these 89 villages was by old accounts 233,908 acres, or 365½ square miles, and by survey 248,018 acres, or 387½ square miles. One village, Kunampatti, consisting of Inam and ryotwari lands intermingled, was omitted through an oversight from demarcation and survey, and is not included in this report. The soils have been classified, and as soon as the survey has been made the settlement rates on survey areas can be introduced.

3. *Physical Features.*—The Strivilliputtur Taluq occupies the north-western corner of the Tinnevelly District. To the north lies the district of Madura, to the east the taluq of Sattur, to the south that of Sankaranainarkovil, and all along the western limit lies the mountain range of the Western Ghauts. This range of mountains rises precipitously from the Tinnevelly plains to a maximum height of about 5,000 feet, while it slopes gradually away on its western side into the country of Travancore. As a natural consequence the water-shed to the east is very limited in extent, no important rivers descend into the plains, and the taluq is irrigated by a series of mountain streams hardly worthy the name of river, which supply 195 out of the 242 tanks within the Strivilliputtur Taluq, and finally end their eastward course by uniting in the Sattur

Taluq to form the Vaipar river which reaches the sea in the taluq of Ottapidaram. The chief of these streams are the Modangiar which irrigates the fertile valley of Wattrap Vattirai Iruppu), the Valakulamar, Peyeranar, and Sholaseriar. The villages near the foot of the mountains are fairly supplied with water, but the areas entered as irrigated both here and elsewhere were often excessive, and it was common to see "dry" grains cultivated on the fields at a distance from the tank where the supply of water is insufficient for rice. The former rates of assessment were applied indiscriminately over the whole area irrigated by a tank, good, bad or indifferent, and the rectification of this anomaly will afford considerable relief. The chief supply of water both for irrigated and unirrigated lands is received during the north-east monsoon. The rain clouds of the south-west monsoon are arrested by the high range of ghauts and give but a trifling supply to the streams on the eastern slopes.

4. The greater part of the plain country consists of black cotton soil of considerable fertility. A few tracts of red gravelly or sandy soil lie on the eastern side of the taluq and scattered here and there elsewhere.

5. *Population.*—The total population of the taluq by the census of 1871 was 180,973 and that of the ryotwari villages alone 158,009. The population is chiefly agricultural. More than half of the irrigated land and about a quarter of the unirrigated is held by Brahmins numbering 6,948, who as descendants of the original shareholders of the villages have hitherto enjoyed fixed money remissions or allowances called *Chaturbagam* and *Shrotriem*. The *Chaturbagam* is a deduction of quarter of the assessment on the "dry" lands entered in the puttas of the representatives of the original shareholders. The *Shrotriem* was a lump sum originally granted as an allowance or remission to the original shareholders of the village and is divided among their descendants in accordance with the shares or fractions of shares they hold. These allowances will henceforth cease.

6. The resumption by Government of these fixed remissions will, I hope, have a beneficial effect for the following reasons:—The fixed remission is enjoyed only by the heirs of the original shareholders of the village, and if theputta land of such a shareholder is transferred to an outsider his portion of the remission lapses to Government. The result of this has been that the shareholders have either nominally or in reality clung to their land for the sake of the remission even when it was otherwise against their interest to do so. Lands which have been mortgaged and sold to others still stand in the name of the shareholder by private agreement in order that the money allowance may not lapse. In many villages when the season is unfavorable numbers of the Brahmin shareholders migrate to Travancore and subsist for months in idleness on the bounties of that State. They of course retain nominal possession of their lands in Tinnevelly, and the fixed remission comes in as a material assistance towards the cost of travelling. As a natural consequence these men care but little for their village. Their dwellings are neglected and they neglect too those little improvements, such as regulating the level of the fields, repairing the distributing channels, collecting manure, &c., which are necessary not merely for improved agriculture but even to avoid deterioration. Within the limits of the same village there is often an astonishing difference between the substantial dwellings and little farm-stands of the laborious Naiks who work hard to get what they can from the "dry" lands and their wells, and the dilapidated houses of the Brahmins who possess what ought to be the most valuable holdings. Much of all this will, I hope, be put an end to by the cessation of these fixed remissions or allowances. Some of the Brahmins will sell their lands outright and migrate for good, while others will remain permanently and devote themselves steadily towards the improvement of their lands, houses, and irrigation. I do not wish it to be supposed that what I have stated applies universally throughout the taluq. On the contrary there are many villages with prosperous Brahmin communities where the fixed remissions merely formed an addition to the regular incomes of the landed proprietors.

7. According to the settlement accounts 4,661 Maravers (puttas 3,284) are holders of land under puttas, and it is satisfactory to find so large a number of this marauding tribe settled down to agricultural pursuits. The total number of Maravers in the taluq is by census 49,980, but unfortunately the details of the census are obviously erroneous in several cases and not much reliance can be placed on them.

8. The most persevering and industrious agriculturists are the Kshatriahs, of whom there are one or two prosperous colonies, and the Naiks. The latter caste are scattered everywhere throughout the taluq and 6,406 puttas are held by 8,404 of them, paying an assessment of Rupees 67,701 per annum. Their perseverance and industry are surprising. In one case I found a small hamlet of Naiks holding all the lands under a small rain-fed tank for which they were paying the exorbitant assessment of Rupees 10-8-6 per acre, a rate only exceeded in one other village in the taluq. They were only just able to eke out a subsistence after paying this tax, but scarcely any other cultivators would have undertaken the task at all. The Naiks, if

their means permit, generally endeavor to build themselves substantial dwellings of rough stone or brick and mortar. The conversion of a thatched hut into a more solid building often takes a number of years, but the object seems never to be lost sight of. The proprietor instead of sending home an empty cart after the day's work is over will hoist in a big stone or boulder which is added to others similarly collected in his back-yard or cattle-shed till there are enough to form the basement of the wall. Some mortar is then bought or burnt and the solid foundations are at last put in. The process is slowly continued till the building is completed.

9. *Grouping.*—All the villages of the taluq have been placed in the same group, namely, the 3rd in the original scheme for the river valley, with the exception of a single poor village brought over from Sattur Taluq, which like the adjacent villages of that taluq is in the 4th group. The minor differences arising from irrigation and position have been met by a suitable application of the table of rates of assessment which is as follows:—

CLASSIFICATION.		Taram.	NUNJAH.		CLASSIFICATION.		Taram.	Rate per Acre.
Class.	Sort.		Single Crop.	Double Crop.	Class.	Sort.		
4	1	3	Rs. 9 0 0	Rs. 18 8 0	2	1	1	Rs. 5 0 0
4	2	4	7 8 0	10 0 0	2	2	2	3 8 0
7	1				2	3		2 8 0
3	1				4	1		
4	3				3	1		
5	1	5	6 0 0	7 8 0	4	2	4	1 8 0
7	2				7	1		
8	1				8	2		
3	2				4	3		
4	4				5	1	5	1 0 0
5	2		4 8 0	5 10 0	7	2		
7	3				8	1		
8	2				3	3		
3	3				4	4		
4	5				5	2	6	0 12 0
5	3	7	3 8 0	4 6 0	7	3		
7	4				8	2		
8	3				3	4		
3	3				4	5		
4	4				5	3	7	0 8 0
5	4				7	4		
7	5	8	3 0 0	3 12 0	8	3		
8	3				3	5		
3	5				5	4		
5	5	9	2 8 0	3 2 0	7	5	8	0 6 0
8	5				8	5		
					8	6	9	0 4 0
							10	0 3 0

10. *Classification.*—The following table shows the classification of the soil of the irrigated area :—

Group.	Description of Soil.	CLASSIFI- CATION.		Total Area in Acres.
		Class.	Sort.	
3rd ...	Best black loam	4	1	1,636
	Good " "	4	2	3,776
	Ordinary black loam ...	4	3	3,920
	Inferior " "	4	4	4,691
	Worst " "	4	5	1,734
	Best red loam	7	1	1,223
	Good " "	7	2	2,472
	Ordinary red loam ...	7	3	1,563
	Inferior " "	7	4	339
	Worst " "	7	5	219
	Good red sand	8	2	2
	Ordinary red sand	8	3	1
4th... ...	Worst red loam	7	5	21,576
		...	...	402
		...	...	21,978

11. *Assessment.*—The following table shows the original areas and assessment under each class on the whole irrigated area as compared with the survey areas and settlement rates:—

Irriga- tion. Group.	As per SETTLEMENT.												As per JAMABUNDI.											
	Rate per Acre.				Survey Area in Acres.				Assessment.				Old Area in Acres.				Assessment.				Average.			
	1st Crop.	2nd Crop.	Total.		1st Crop.	2nd Crop.	Total.		RS.	A.	P.		RS.	A.	P.		RS.	1st Crop.	2nd Crop.	Total.		Extent.	Assess- ment.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
2	9	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.	A.	RS.
3rd.	0	..	9	0	..	1,636	14,725	..	14,725	..	1,656	13,459	..	13,459	..	14,852	8	10	5	..	..	..	..	..
4th.	8	7	8	7	8	4,999	37,488	..	37,488	..	4,653	36,311	2,177	38,488	..	7	12	10	..	..	..	..	..
5th.	6	6	6	6	7	913	5,478	1,370	6,848	..	848	5,874	..	6,574	..	6	14	10	..	..	..	..	..
6th.	0	0	0	0	6	0	5,479	32,876	..	32,876	..	5,110	33,080	2,763	35,843	..	6	7	7	..	..	..	..	..
7th.	1	2	1	2	5	10	2,114	9,525	2,378	11,903	..	1,940	12,895	1,152	13,547	..	6	6	3	..	..	..	..	..
8th.	4	4	4	4	4	142	18,641	..	18,641	..	3,866	20,157	1,885	22,042	..	5	5	5	..	..	..	..	..
9th.	3	3	0	0	14	4	6	1,246	..	1,246	..	1,271	7,157	..	7,699	..	5	10	1	..	..	..	..	..
10th.	8	3	3	0	12	3	12	2,276	..	2,276	..	3,69	2,208	192	2,400	..	3	12	0	..	..	..	..	..
11th.	3	0	3	0	0	12	35	106	..	106	..	34	138	..	138	..	4	0	11	..	..	..	..	..
12th.	3	0	3	0	0	184	551	..	551	..	171	498	4	502	..	2	14	7	..	..	..	..	..
13th.	..	..	..	..	..	21,576	1,26,627	..	1,26,627	..	..	20,040	1,31,647	5	13	11	10,808	1,42,085	6	8	10	..	+ 1,536	- 466
14th.	2	8	0	10	3	2	245	617	158	770	..	217	701	10	711	..	3	3	8	..	..	..	..	..
15th.	2	8	..	..	2	8	157	393	..	393	..	142	458	1	459	..	3	3	7	..	..	..	..	..
16th.	..	..	..	..	..	..	..	402	..	1,010	153	..	359	1,159	..	1,170	..	3	5	8	..	+ 43	- 149	
17th.	..	..	..	..	..	..	..	21,978	1,27,637	..	5,173	1,32,810	5	12	11	20,399	1,32,436	6	7	11	..	+ 1,579	- 4,797	

12. *First Crop.*—The net result of the 1st-crop assessment on the irrigated lands is thus shown to be a decrease of Rupees 4,799. The former average was Rupees 6-7-11 per acre. The settlement average is Rupees 5-12-11 or 11 Annaas per acre less than formerly. Under the two highest classes, there is an increase of Rupees 2,443 in the assessment, and the reduction is entirely on the comparatively inferior lands.

13. *Second Crop.*—The second charge has been consolidated on 4,730 acres out of 21,978. On this area, the 2nd-crop assessment of Fasli 1286 was Rupees 2,404, while by settlement it is Rupees 5,173, showing an increase of Rupees 2,769.

14. *Totals.*—The total assessment for both 1st and 2nd crop on the area now assessed with a permanent double-crop rate was in Fasli 1286 Rupees 28,669; by settlement it is Rupees 25,860. There is thus a decrease of Rupees 2,809. There remains an area of 17,248 acres by survey which is assessed by settlement for the 1st crop alone at Rupees 1,06,950. The 1st-crop assessment on the same land in Fasli 1286 was Rupees 1,06,171, showing an increase by settlement of Rupees 779.

15. Last fasli, however, a very large portion of this area was cultivated with 2nd crop which paid an assessment of Rupees 8,415. Any 2nd crop hereafter grown on this land will pay an assessment of three-fourth of the full rate, but as this depends on the season and the inclination of the ryot, no receipts can be credited on account of it to the settlement and there thus appears to be a loss of Rupees 8,415 which, however, is a loss by account only and is merely nominal. To illustrate this it will be sufficient to give the area cultivated with second crop in Fasli 1285, which was an ordinary year. Last Fasli (1286) was quite exceptional as the north-east monsoon almost totally failed, but heavy falls of rain in May and still later gave supplies to the tanks with which a so-called 2nd crop was raised :—

	Area.			Assess- ment.	
	ACRES.	RS.			
2nd-Crop Cultivation, Fasli	{ 1285	... ...	1,143	3,718	
	{ 1286	... ...	3,348	10,819	
			<hr/>	<hr/>	<hr/>
	Excess in 1286	... ...	2,205	7,101	

Three hundred and sixty-one acres of the area entered in last fasli's accounts as second crop were cultivated with "dry" grains and paid an assessment of Rupee 1 per acre, but the assessment entered in the accounts was the full 2nd-crop rate amounting to Rupees 1,663, and the difference between this sum and the amount collected was struck off as remission. As, however, my comparison must be made between the settlement total and that of Fasli 1286, the result appears as a loss of Rupees 10,445 on the assessment of the irrigated area.

16. The foregoing statement takes no account of the difference between the river-fed and the rain-fed tanks, and in fact such a distinction is difficult to make and of little value when made. There is little in common between the splendid river irrigation of the Tambrapurny valley in the south of the district and that of the jungle streams and mountain freshets which supply Strivilliputtur. Only a few tanks are supplied entirely by the local rainfall. All those that lie immediately east of the mountain range receive a direct supply from the hill streams which vary in size according to season and catchment basin from a small rivulet enough for a single small tank to a torrent that will supply twenty. Most of the streams pass on from tank to tank by the surplus weirs, the proportion of hill water to local rain-water constantly diminishing down to the furthest-tank to the east. It is thus difficult to classify the irrigation into river-fed and rain-fed,

but as the distinction has been made elsewhere, I have picked out forty seven tanks which receive no supply except from local rains and have tabulated the results of the settlement comparing these 47 as rain-fed with the remaining 195 as river-fed.

17.

Classification of Soils.

Irrig. Group tion.	Rate per Acre.			Assessment.			Old Area in Acres.			Assessment.			Average.			Difference.		
	Survey Area in Acres.		Total.	1st Crop.		2nd Crop.	Total.		1st Crop.		2nd Crop.	Total.		1st Crop.		2nd Crop.	Total.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
River-fed.	RS. A.	RS. A.	RS. A.	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
3rd {	9 0	0	0	9 0	1,636	14,725	14,725	1,556	13,459	1,398	14,82	8 10	5	8 10	5	8 10	5	
7 8	7 8	7 8	7 8	4,688	25,156	35,156	4,368	33,926	1,945	35,87	7 12	3	7 12	3	7 12	3		
6 0	6 0	1 8	7 8	801	4,807	1,203	6,010	747	6,079	615	5,694	6 12	9	6 12	9	6 12	9	
6 0	6 0	0	6 0	5,118	30,680	30,680	4,771	30,988	2,443	33,431	6 7 11	11	6 7 11	11	6 7 11	11		
4 8	4 8	1 2	5 10	2,069	9,392	2,327	11,649	1,898	11,958	1,152	13,110	6 4 10	10	6 4 10	10	6 4 10	10	
4 8	4 8	8 15	4 6	8,315	14,920	14,920	4,531	3,099	16,359	1,505	17,864	5 4 6	6	5 4 6	6	5 4 6	6	
3 8	3 8	0 14	4 6	1,040	3,620	911	5,620	931	5,105	597	5,612	5 7 9	9	5 7 9	9	5 7 9	9	
3 8	3 8	0 12	3 8	288	633	633	26	217	806	70	876	3 11 5	5	3 11 5	5	3 11 5	5	
3 0	3 0	0 12	3 12	35	106	132	34	34	138	105	324	3 0 11	11	3 0 11	11	3 0 11	11	
3 0	3 0	0 12	3 0	116	345	345	345	345	345	105	324	3 1 4	4	3 1 4	4	3 1 4	4	
...	19,951	1,14,514	4,467	1,18,981	6 0 2	17,726	1,18,142	9,631	1,27,773	6 10 8	8	6 10 8	8	6 10 8	8
4th.	2 8	0 10	3 2	245	617	153	770	...	217	701	10	711	3 3 8	8	3 3 8	8	3 3 8	8
2 8	2 8	0 10	2 8	167	393	393	393	393	142	456	11	459	3 3 7	7	3 3 7	7	3 3 7	7
...	402	1,010	1,010	1,010	1,168	2 8 2	359	1,159	11	1,170	3 3 8	8	1,170	3 3 8
...	19,453	1,15,624	4,620	1,20,144	5 15 0	18,085	1,19,301	9,642	1,28,943	6 9 7	7	6 9 7	7	6 9 7	7
Rain-fed.	7 8	7 8	7 8	811	2,332	167	2,332	...	285	2,385	...	2,617	8 5 11	11	8 5 11	11	8 5 11	11
3rd {	6 0	1 8	7 8	112	671	2,196	2,196	101	795	44	880	7 13 11	11	7 13 11	11	7 13 11	11	
6 0	6 0	6 0	6 0	366	2,196	2,196	339	2,092	42	2,412	6 2 9	9	6 2 9	9	6 2 9	9		
4 8	4 8	1 2	5 10	45	203	61	254	44	437	437	10 6 4	4 4 5	4 4 5	4 4 5	4 4 5	4 4 5		
4 8	4 8	0 14	4 6	827	8,721	8,721	3,221	769	8,798	380	4,178	14 15 0	0	14 15 0	0	14 15 0	0	
3 8	3 8	0 14	4 6	383	1,341	385	1,676	340	2,052	95	2,087	6 0 7	7	6 0 7	7	6 0 7	7	
3 0	3 0	0 12	3 8	413	1,443	1,443	1,443	372	1,402	123	1,524	3 12 4	4	3 12 4	4	3 12 4	4	
...	...	...	...	68	206	206	206	66	174	3	177	2 10 11	11	2 10 11	11	2 10 11	11
...	2,525	12,113	553	12,666	4 12 9	2,314	13,135	1,177	14,312	5 10 10	10	5 10 10	10	5 10 10	10
										+	2 1		+	2 1	
																	- 1,022	

As PER SETTLEMENT.

As PER JAMABANDI.

19. It must not be supposed that the whole extent now permanently assessed for two crops is certain to receive of a sufficient supply of water for the cultivation of a second crop of rice during the south-west monsoon, as is the case in the Tamrapurni valley in the southern taluqs of the district. On the contrary only those villages near the foot of the mountains are likely to receive such a supply. The ryots, however, were encouraged by the lowness of the consolidated rates to ask for the double-crop assessment with two objects. First, because after the reaping of the rice-crop during the north-east monsoon, there may often remain enough water in the tanks to suffice for the growth and maturity of a crop of "dry" grains, such as raggi, cumbu, cholum which need comparatively little water; and, secondly, because with a consolidated assessment they are encouraged to sink wells within the area under tank irrigation to supplement the supply received from the tank and enable them to raise an additional crop when the tank supply is exhausted.

20. In connection with this subject, I venture to mention what so far as my experience goes appears to be a drawback to the excellence of our ryotwari system with regard to lands which ordinarily receive sufficient water for only single crop. For the first crop the ryot is urged to do his best, because he will receive no remission of assessment if he fails through his own neglect to sow and reap. But with regard to subsequent cultivation, the case is quite different. Enough water may remain in the tank for a crop of raggi or other "dry" grain, but it is hardly worth the ryots' while to raise it when he will have to pay for it an additional assessment amounting to three-quarters of the first-crop charge. For the same reason, it is against his interest to sink a well within his irrigated holding. He must, of course, lose the interest on the capital invested in the well, but he will also have to expend on account of a crop raised by irrigation from his well, not only the wages of labor for raising the water, but also an assessment amounting to three-quarters of first-crop charge. The ryot is naturally disposed to improve and develop by well irrigation his best lands, viz., the irrigated, as he already manures them for the regular rice-crop, and lays out and preserves the field channels which distribute the water from the tank. But against such a course the Government charge for a second crop coupled with the cost of sinking the well and raising the water acts a serious embargo. The result is a loss both to the ryot and to Government. To the ryot directly; because he is deterred from employing his labor and capital to the best advantage; and to Government indirectly, because as the lands I speak of do not receive tank-water for a second crop, no revenue is at stake; but the ryots who contribute the bulk of the revenue of the country are prevented from developing their resources and increasing their petty earnings. The imposition of the consolidated settlement rate for the double crop will no doubt have excellent effects, but the large area both in this taluk and elsewhere still assessed for only a single crop represents, I think, a considerable discouragement to the sinking of wells in the places best suited for them.

21. *Baling from Rivers or Channels.*—Two hundred and eighty acres assessed at Rupees 537-11-0 in Fasli 1286 are now found by survey to be 297 acres on which the settlement is Rupees 776. The settlement rate for baling is half the full rate of the adjacent block of irrigated land.

22. *Garden-lands.*—There is a very considerable increase under this head. Hitherto the lands irrigated from old wells were assessed at rates which varied from 8 Annas to Rupees 12 per acre according to the crop. Tobacco was the highest, while if raggi and other similar grains were cultivated, nothing was charged but the ordinary "dry" land assessment. No less than 4,946 acres out of 6,783 acres entered as garden were thus cultivated with "dry" grains last fasli, but this area is variable as the ryots sometimes cultivate "dry" grains and at other times the special crops such as tobacco, chillies, plantains, sugar-cane for which the higher rates were charged. The low charge now fixed on all these old well lands will probably lead to a great development of cultivation in tobacco, chillies, and other valuable crops. In one village, the ryots told me that a good crop of tobacco would be worth Rupees 50 an acre and the cost of growing it Rupees 20. But it is only lands richly manured that will yield this crop.

23. The whole area irrigated by the wells irrespective of crop has now been brought to assessment : 709 acres assessed in Fasli 1286 at Rupees 2,665 are now assessed at Rupees 3-8-0 per acre on a survey area of 797 acres, giving an increase of Rupees 129. The remaining area, amounting to 5,674 acres assessed in Fasli 1286 at Rupees 8,952, is now by survey 5,986 acres which have been assessed at Rupees 2-8-0 per acre, which is the lowest rate for such lands, thus giving an assessment of Rupees 14,983, or an increase on the former assessment of Rupees 6,031. The total increase is thus Rupees 6,160, and it is probably in a form as little onerous as any such increase can well be.

24. *Ordinary "dry" lands.*—These are on the whole fertile, valuable, and well cultivated : 18,880 acres of culturable "dry" land out of a total of 168,553 or 11·2 per cent. are now waste.

The following tables give the details of the soil, and a comparison of the present and former assessments on the dry lands at a glance :—

Description of Soil.	Classification.		Rate per Acre.		As per Settlement.			As per JAMABANDI.			Difference.	
	Class.	Sort.			Extent.	Assess-ment.	Average.	Extent.	Assess-ment.	Average.	Extent.	Asses-ment.
			RS.	A. P.								
Best black loam.	4	12,170	Garden	...	RS. 3 8 0	ACRES. 797	RS. 2,665	RS. 8 12 2	...	RS. ...
Good do.	4	35,881		...	2 8 0	5,986	8,953	1 9 8	...	RS. ...
Ordinary do.	4	31,573		...						
Inferior do.	4	7,792	Total...	...						
Worst do.	4	421								
Best red loam...	7	1	9,263							
Good do.	7	2	19,983							
Ordinary do.	7	3	18,986							
Inferior do.	7	4	853							
Worst do.	7	5	117							
Best red sand...	8	1	8,133							
Good do.	8	2	8,116							
Ordinary do.	8	3	1,439							
Total....	1,49,673	Total ...	...	149,673	1,80,373	1,42,229	1,33,898	1 4 8	+7,444 —3,425

25. It will be seen from this table that 12,170 acres have been assessed at the highest "dry" rate, viz., Rupees 2-8-0 per acre. This rate is, of course, only imposed on the finest black soil. Out of the total extent thus assessed, 8,078 acres or just two-thirds of the whole lie within the four subdivisions of the great village of Watrap, which is the richest in the taluq, lying in a fertile valley that runs into the Western Ghauts, and receives an exceptionally abundant supply of rain from the clouds that hang over it during both monsoons. The result of the assessment on the unirrigated lands is a decrease of Rupees 3,525, and the average rate is lowered by 1½ Annas per acre. Rupees 3,448 out of the total loss under this head is due to the reduction of assessment on 737 acres of irrigated land, formerly assessed at Rupees 4,223, which are now transferred to unirrigated and assessed at Rupees 775. These nominally irrigated lands were practically never supplied with water, and though their assessment swelled the nominal revenue, the amount was annually remitted as the lands lay waste. The former rates of assessment on the unirrigated land were unusually high, especially in a group of northern villages originally transferred from the Madura District; but the relief given appears chiefly in the fact that the total revenue is somewhat reduced, although the total area settled shows an increase of Rupees 7,444 acres over the old measurements.

26. *Palmyrahs*.—The total number of palmyrahs by the settlement accounts is 216,226 as compared with 219,972 by the old accounts. The charge on palmyrahs in the cultivated fields has for the most part been consolidated for a sum total of Rupees 2,091. This is the charge for palmyrahs only and is over and above the assessment of the field the palmyrahs stand on. The fixed charge in each field includes Rupees 137, assessment on 54,682 seedlings which have hitherto paid no assessment. The ryots may now cut what trees they please and plant what more they please without extra charge. Palmyrahs other than just referred to, viz., those owned by persons other than the landholder and those on Government waste lands and lands set apart for public purposes, amount to 103,331 in number, and are assessed at Rupees 2,592. The total assessment on palmyrahs is thus Rupees 4,683; the former assessment was Rupees 4,376, and there is an increase by settlement, Rupees 307, over the assessment of Fasli 1286. There are also 65,262 seedlings which will be charged for as they come to maturity.

27. *Pasturage*.—Twenty villages bordering the hills possess extensive grazing grounds on the unsurveyed mountain slopes which are also resorted to for the same purpose by other villages farther east. In most of the remaining villages, the cattle are grazed on theputta lands and Government waste. In two villages 520 acres of waste land have been set apart specially as grazing ground. In most of the villages, the area left waste is limited in extent and theputta lands were too valuable to be given up for general pasture.

28. *Building Sites*.—Fifty-six acres assessed at Rupees 64 have been added to the building sites where necessary. No puttas have been issued for lands or trees within the building sites.

29. *Samudayam or Common lands*.—One-thousand, six hundred and sixty-six acres of lands held in common in ten villages have been divided, but 979 acres in twenty-six villages are still held in common by the villagers. In most cases some of the shareholders who had left their villages for Travancore and elsewhere during the distress of last year had not returned and without the consent of all the parties concerned the division cannot be effected. The necessity of completing the settlement of the taluq within the current official year precluded the delay which the complete division of the Samudayam would have involved.

30. *Puttas*.—Three thousand, two hundred and thirty puttas have been transferred with the consent of the parties concerned.

31. *Permanent Deductions*.—The following fixed deductions from the revenue, amounting to Rupees 6,555-15-0, will still continue and form part of the Village Service Fund of the taluq:—

	RS.	A.	P.
Dupatti Maniem	741	0	0
Money payments to village officers for collecting revenue and other services.			
Curnams' salaries	2,594	4	0
Nattamai Maniyam	1,728	7	6
Money payments to village officers for collecting revenue.			
Tandal	185	15	6
Money payments to village officers for summoning the ryots to pay their assessment.			
Totti	354	2	10
Money payments to village officers for conveying money to the trea- sury and other services.			
Kaval	271	15	11
Money payments to village officers for watchmen.			
Kulumpallan	201	■	8
Money payments to village officers for distributing water for irrigation.			
Total ...	<u>6,077</u>	<u>3</u>	<u>5</u>

32. The following deductions also have hitherto been made from the revenue and orders are required as to their disposal for the future :—

	RS.	A.	P.	
Barber's Maniem	78	12	5	Money payments to Barbers.
Dhobys	31	2	6	" Washermen.
Carpenters	33	7	9	" Carpenter.
Kothupadi	17	5	4	" for harvesting.
Devadayam	21	3	5	" Hindu temples.
Arthamaniyam	171	9	9	"
Pallivassal	125	2	5	Mosques.
Total ...	478	11	7	

33. *Results of the Settlement.*—The total land assessment by settlement over the whole area is Rupees 3,31,738. The gross land assessment over the same area in Fasli 12^{4/5} amounted to Rupees 3,39,307. From this the Chaturbagam and Shrotriem remissions (referred to in paragraph 5), amounting to Rupees 8,096 and Rupees 2,873 respectively, in all Rupees 10,969, must be deducted, as they will henceforth cease. The comparison will stand thus :—

	RS.
Gross assessment of Fasli 1286	3,39,307
Deduct fixed remissions	10,969
	3,28,338
Assessment by settlement	3,31,738
	3,400
Increase ...	

There is thus a net increase of Rupees 3,400 or 1 per cent. on the whole. This does not include the second-crop assessment on single-crop lands which raise a second crop on an area which varies with the season. The increase in the Ambasamudram Taluk, the richest in the district, was only 2½ per cent. To the 1 per cent. increase in land revenue in Strivillipattur Taluk by settlement, there will be added, it must be remembered, the new and serious impost of 6½ per cent. for the village service cess. The increase from the assessment on palmyras, Rupees 307, must be added to the land revenue to give the whole total. The total increase of revenue to Government is thus Rupees 3,707 per annum.

34. *Redemarcation.*—The work of replacing missing survey demarcation stones at the corners of fields, &c., and of sinking all such stones level with the surface of the ground has made considerable progress, but in order to hasten the progress of the actual work of settlement, I found it necessary to concentrate all hands on classification, registration, and preparation of puttas, and to put a temporary stop to the work of redemarcation. Now that the settlement is finished, I have arranged to send a staff of men to the unfinished villages, and they will, if necessary, complete the redemarcation under the orders of the General Charge Deputy Collector and the Tahsildar.

35. *Public Works.*—The season was altogether unpropitious for works of public improvement such as roads, bridges, embankment, sluices and the like in connection with the settlement. Last year's scarcity had impoverished the people in most villages and the disastrous floods of December had done so much damage throughout the river valley in the south of the district that all available Local Funds were required there, and the Collector was unable to make any of those small allotments which act as a nucleus for the fund which the villagers often endeavor to raise for their local improvements.

36. I was therefore quite prepared to see the settlement of the Strivillipattur Taluk completed without any of the attendant advantages in local works which added to the success of the settlement in the southern portion of the district. On this account, too, I at first discouraged all such applications as were made to me. A few cases were, however, so strongly urged by the villagers themselves and by the local officers that I gave what assistance I could to the Deputy Collector and Tahsildar towards helping matters forward. Some account of these works may be of interest. The accompanying taluk map will show the localities of the works referred to.

37. Three miles west of Strivillipattur, at the foot of the mountains, is the wealthy village of Valaikulam, which was one of the few that received a good supply of water for irrigation last year, and by consequence realized high prices for grain. The track between this village and Strivillipattur was in a miserable condition—a cart was upset and the driver killed by suffocation

in the mud three months ago—and the villagers were anxious to effect an improvement. An allotment of Rupees 500 had been made in the current budget for a road here, and to this the villagers volunteered to subscribe as much more as was needed. Mr. McNair, the Sub-Engineer, was good enough to make out an estimate for the work, amounting to Rupees 1,900 odd, including two small culverts, three road-dams, and one 4-vent bridge. The work is now rapidly going on. The Village Munsif of Strivilliputtur, a large landholder under the Valaikulam tank, has been the chief mover in the matter, besetting me with applications and offering to guarantee the whole amount required out of his private funds.

38. The four villages of Wattrap, formerly a single village, lie at the head of a valley within the mountain range. They are well watered by streams from the mountains and are of considerable wealth, paying a total revenue of about Rs. 60,000 a year to Government. Here the ryots desired to raise a roadway, throw bridges over the river and the channel that run through the main village and, if possible, extend the road ten miles eastward to join the Trunk Road No. 9 to Madura. An estimate for Rupees 2,500 for the work within the village and Rupees 6,100 for the eastward extension were made by the Sub-Engineer, and a fund of about Rupees 3,000 has been raised by the sale of the right of occupancy of waste lands. A choultry for the accommodation of travellers was also determined upon by the villagers, and an estimate framed, amounting to Rupees 1,600. A few wealthy men have given substantial assistance by donations, amounting to Rupees 700, and this work also is in rapid progress. An endowment of land has also been made over to the institution by the villagers. This village is specially noteworthy for what it has already done in the same direction. About five years ago, during a tour there, I suggested the improvement of a large bathing pool, and since that time the villagers have spent some Rs. 4,000 of their own money in building fine stone ghauts and retaining walls, converting the pool into a fine tank. They have received only Rupees 200 from Local Funds by way of assistance. About the same time they purchased a site and built a neat little school-house (total cost Rupees 1,000) where, during a recent visit, I found a number of boys who seemed to be receiving good instruction and had made capital progress in English.

39. Two hamlets of this village are being connected by a road a mile long to cost Rs. 240. The money is already available and consists of a sum allotted by the Madura Court to the villagers as costs in a suit decided in their favor. The amount has been devoted by the villagers to this useful improvement.

40. In the village of Sundarapandiyam, immediately adjoining Wattrap, a sum of Rupees 700 has been subscribed to build a bridge over the stream that separates the village from the main road.

41. A village road three miles long to cost Rupees 500 between Road No. 8 and the village of Samsikapuram is under construction, and Rupees 300 have been given in subscriptions. The line passes over gravelly soil where a small outlay is sufficient.

42. A sum of Rupees 300 has been subscribed by some well-to-do Brahmins and others, resident in the town of Strivilliputtur for the purpose of building a girls' school. Further donations are expected, and arrangements have been made to secure a good site.

43. The most important works have been undertaken at Rajapalaiyam, a town seven miles south of Strivilliputtur and inhabited by the landholders of many surrounding villages. As its name implies it is largely inhabited by an ancient colony of "Rajus," a tribe of the Kshatriyah caste. These Rajus are of finer physique than ordinary, they are active, energetic and persevering and are excellent farmers. They are unfortunately almost always on some ground or other at feud with their neighbors the Brahmins of the same town. I visited this place on a tour five years ago, and the people were then in the most lively state of animosity. A road was being made for them out of Local Funds to lead to the foot of the mountains where their large herds of cattle are regularly taken to graze. The Brahmins, however, resisted on the ground that the road went too near their sacred precincts, the Raju landholders on the proposed route resisted for other futile reasons, and the unexpended portion of the allotment was finally withdrawn and the road was never completed. On my visiting and inspecting these villages for settlement I found that the last few years had effected a great change. The people had opened their eyes to the great value of the rejected road, and they were most anxious, if possible, to build a bridge at their own cost over the river that cuts the road about half-way to the mountains. This bridge will cost about Rupees 2,000, of which Rupees 900 is already in hand and subscriptions have been promised for the remainder. Materials have been collected, but it is necessary to wait till the bed of the river is dry before excavating for the foundations.

44. A still more urgent need in Rajapalaiyam was a choultry or rest-house for travellers. The town lies at the junction of two of the main roads of the district (No. 8 from Tinnevelly to Rajapalaiyam, and No. 9 from Tenkasi to Madura via Strivilliputtur); there is much traffic through it and numerous merchants and others halt there for trade and business. On my former visit this need of a choultry was mentioned by many, but all said it was no good to expect them to give any assistance themselves. This time, however, they brought the subject forward again and said they were all ready to assist as far as they could, but the difficulty now was that owing

to the old feud the Brahmins wanted to build a chuttrum on their own account within the Brahmin quarter, while the Rajús wanted to build one by the main road. The Rajús had money but no materials, while the Brahmins were not very well off for funds but had the great advantage of a vast quantity of dressed stone forming an old ruin two or three miles out of the town. It was evident that if both parties would lay aside their hostility and unite forces for the construction of one and the same building a capital result might be secured, but not otherwise. On inquiry I found that the chief grievance of recent times was that a Rajú some years ago had surreptitiously slipped in a successful application to the revenue authorities for an acre or two of open ground that fronted the Brahmin street. Part of this land he had cultivated, and he was constantly tormenting the Brahmins by threatening to cultivate the rest which they wanted left as an open common. A crop of complaints and counter-complaints before the magistrate had naturally ensued. After some persuasion, the Rajú finally agreed to sell the open common land to the Brahmins for a trifling sum of about Rupees 40, which they gladly paid. The cause of dissension being thus removed, the feud collapsed, and all parties (temporarily at least) came together on most friendly terms. They agreed to unite in building a choultry in common on an excellent site not far from a good tank and near the junction of the main roads. The Brahmins gave as a first subscription their old ruin, the removal of which was let out on contract, and between five and six hundred cart-loads of dressed stone were soon deposited on the site. An estimate was made out which, as corrected by the Sub-Engineer, amounted to Rupees 5,600. The work has however been parcelled out as far as possible among the villagers themselves, and the building will be completed for considerably less than the estimate. The choultry will contain four large halls, 40 feet long by 26 broad, and will have a frontage of 118 feet. The two chief entrances are of stone as also are the pillars and verandahs. The foundation stone was laid on the 18th January, and at the conclusion of the ceremony, Durma Rajú, the head of his party, and a member of the Tinnevelly Local Fund Board, announced that he would endow the building with lands worth Rupees 360 a year. His example has been followed by the Brahmins and others, who have added endowments of land, amounting in all to 21 acres of irrigated and 9 acres of unirrigated land. All these lands have been formally made over to the chuttrum by deed of gift. There will thus be no difficulty about the upkeep of the institution. It is to be managed by a Committee of Rajús and Brahmins with the Tahsildar for the time being as President. The foundations of the building were got in some time ago, 200,000 bricks have been burnt, the walls are rapidly rising, doors and windows are ready, and the wood for beams and rafters has been procured. The villagers hope to complete the building next month.

45. I must bring to your notice the active assistance rendered in these matters by H. Subbaraya Ayar, the General Charge Deputy Collector, whose energy and conciliatory ways were of the greatest value, and by the Tahsildar, Saravanamuttu Pillay, and the Watrap Sub-Magistrate, Ambalavanya Pillai, who have worked unflaggingly to secure successful results.

I am also indebted to Supervisors Seshaiyangar, Ramaiyar, and Balu Naidu, and to Head Classifier Ramachandra Row, for their active industry and co-operation in bringing the settlement to an early close.

46. The usual scroll maps (to follow) showing classification of the soil together with a map of the taluk are herewith forwarded. The registers with eye-sketches and descriptive memoirs will be forwarded to Madras for printing as soon as checked and compared. I have tried to make the descriptive memoirs more complete by appending a list of all the unsettled as well as the settled Inams. The blocks in which the unirrigated lands are assessed are also given in detail with the rates of assessment..

ENCLOSURE No. 3.

THE SETTLEMENT OF TINNEVELLY.

THE district of Tinnevelly includes the country between the Madura frontier and the Travancore boundary and between the gulf of Manaar and the western ghauts. It is 120 miles in length by a maximum of 75 miles in breadth and has a population of 1,691,426. Its total area is 5,145 square miles, of which 1,665 square miles are Zemindari and Inam, and 3,024 square miles are ryotwari. The ghaut mountains have not been surveyed.

2. The settlement now made affects the ryotwari villages for a period of thirty years, the Zemindari and Inam villages being already permanently settled. In the ryotwari villages 2,186 square miles are cultivated, 571 square miles are occupied by hills, roads, streams, tanks, village sites, &c., and 185 square miles are waste, but fit for cultivation.

3. In general appearance Tinnevelly is not picturesque, the north-eastern portion being a level plain of black cotton ground and the south-eastern portion a mere sketch of sand, dotted over with palmyrah trees, but at the foot of the western mountains and along the river valley the country is wild and beautiful, and the cultivation is as rich as in any part of the Carnatic.

4. The river valley comprises the whole country watered by the Tambrapurni and its affluents, fifteen in number. In many respects it is like the Cauvery valley, but it has some characteristics of its own. The sub-soil generally is clay instead of sand ; the lands are mostly irrigated from channel-fed tanks (of which there are 580) instead of from channels direct ; and the care bestowed upon the land, and the pitch of excellence attained in cultivating it, is in pleasing contrast to the careless system of husbandry pursued in the Cauvery districts.

5. Some of the principal towns of Tinnevelly are situated in this valley. Tinnevelly, the capital of the district and the Military Cantonment of Palamicottah, are within 3 miles of each other, though on opposite sides of the river. Veeravanallur, 15 miles, and Kalladakurichi, 20 miles west of Palamicottah, not only supply Travancore with much of the cloth worn by the people, but are the granaries from whence vast quantities of rice are exported both to the north and south. Besides these there is the sanitarium of Courtillum, which, unlike other places resorted to for their climate in India, is at the foot of and not on the hills, and is cool and pleasant from June till October, or during the prevalence of the south-west monsoon.

6. The palmyrah forest includes the coast line south of the river, and is some 50 miles in length by from 5 to 10 miles in breadth. The palmyrah palm here takes the place of cereal grains, and is cultivated by a large population who live almost entirely on the fruit and juice of the palm. The country is all deep sand, nearly impassable for wheeled conveyances ; water is by no means abundant, though it is to be found in some places, and there the excessive fertility of the deep red sand when watered produces abundant crops of coarse plantains and other fruits and vegetables.

7. The barren aspect of this region generally and the scarcity of cereal grains have hitherto deterred the higher classes from attempting to settle in it, so the fishermen on the coast and the Shanars or palmyrah climbers inland are almost the only occupants. The palmyrahs prior to settlement were estimated to number five millions of taxable trees, besides many millions of young trees that had not come to maturity and were as yet free from tax.

8. The tax, which averaged 5 Pies on each full grown tree, has from time immemorial been imposed on every palmyrah in bearing in all ryotwari villages without regard to the land being waste or cultivated, and without regard to the person by whom the trees were planted. Thus the trees growing on private holdings and those on Government waste are charged alike, and the tree-tax on a given field is often much in excess of the land-tax, and one of the most valuable changes effected by settlement is the consolidation of the tax on palmyrahs on a very large percentage of fields.

9. The former system provided for a triennial inspection of these trees, which were classed in three grades according to quality, and assessed at rates varying in nearly every village. The seedlings remained untaxed, and were only brought to account when they became old enough to trim for their leaves. The plan adopted at settlement was to take the existing tree-tax on each field and turn it into the nearest round figure, adding a charge for the seedlings at the rate of twenty-five per anna, and thus a fixed sum is arrived at representing the annual tree-tax leviable on that particular field ; in illustration, a field that formerly paid Rupees 1-2-7 for taxable trees may have, say, 100 untaxed seedlings growing on it. The former assessment is now converted into Rupees 1-3-0, and to this 4 Annas are added as the charge for the seedlings, making a total assessment of Rupees 1-7-0, payable, under all circumstances, in addition to the land-tax, whether the trees are cut or more are planted, and the amount of this permanent tree-tax is entered in a separate column in the settlement register. We thus get rid of the need of a triennial inspection of 6,878,220 palmyrahs, assessed at Rupees 94,534, and bring in an immediate additional revenue of Rupees 18,000 per annum. The remaining palmyrahs, which are not compounded for as they stand mostly on Government waste land, remain very much as before, except that they are now charged at uniform rates in every village, viz., at 1 Anna or 6 Pies, or 3 Pies per tree according to class.

10. The red soil tract at the foot of the hills on the western frontier of the district much resembles parts of Salem, and is similarly intersected by small streams and diversified by hill and hollow. On the higher levels the soil is poor and hardly worth cultivating, but in the hollows and along the course of the streams the soil is excellent, and a good deal of rice is grown. As is commonly the case in districts partly Zemindari the richest villages are held by Zemindars, the Sattur and Sivagiri Zemindars, and the purchasers of Chokampatti estate occupying a large tract of country immediately at the foot of the hills. There are, however, 104 ryotwari villages in the red soil tract to the north and east of those Zemindaries, but there are only two large towns Sankaranainarkovil and Strivilliputtur, and these are more famous for their pagodas than for their manufactures or trade.

11. The black cotton plain lies north of the river between the red soil tract and the sea. A considerable portion of it is held by the Ettiapuram Zemindar, who pays a tribute of nearly a lakh of rupees per annum. There are also minor Zemindaries, besides 203 ryotwari villages.

The soil is deep alluvial deposit, overlying a substratum of lime-stone, and is cultivated to the very utmost. In fact from the Madura border to the Sittar river, a distance of 50 miles, there is hardly a waste field to be seen.

12. This black soil grows two crops in the year, generally cotton and cholum. An immense quantity of tobacco is also grown here, Virupatti and Sivakasi being centres of the tobacco and cotton trade. The South Indian Railway passes through this part of the country and takes cotton down to the coast and carries back salt in return.

13. The old Dutch Settlement of Tuticorin has a natural harbour for native craft, which ply continually in the gulf of Manaar between the main land and Ceylon. The European merchants of Tuticorin have several cotton screws, and sixteen ships, with an aggregate of 9,924 tons burden, were loaded last year for Europe.

14. The exports of Tinnevelly are cotton, cloth, coffee, rice, tobacco, senna, and palmyrah sugar, and the imports are piece-goods from Europe, and cocoanuts, salt fish, and spices from Ceylon and Travancore. The exports are so vastly in excess of the imports in value that the flow of money is always into the district and the Government demands of all kinds, which amounted in the aggregate to Rupees 41,27,161 last year, were more than paid by the price realized for cotton alone.

15. As far as food-grains are concerned the district is self-supporting. In the north more than enough dry grain is grown for home consumption and the deficiency of rice is made up by imports from the river valley. Near the river rice is over-abundant, and some dry grain is grown in the uplands for the food of the poorer classes. In the south the people live on their palmyrahs and on what little grain they grow, eked out in times of scarcity by imports from the river valley.

16. There are very few north country Musselmans in Tinnevelly, though there are numbers of Lubhays who are mostly merchants and weavers. In the north of the district there are Reddies and Naiks, both of Telugu origin, and some few families of Reddies have found their way as far south as Nanguneri. The Reddies are a hard working race, who lay out all they can get on the soil and are thus most useful agriculturists. The Naiks are the descendants of the soldiers who overran the kingdom of Madura some 400 years ago. As a race they are very improvident, but here they seem to have imitated the Reddies, and in many instances have become considerable landed proprietors.

17. Siva Brahmins are numerous throughout the richer parts of the district, but Vishnu Brahmins mostly congregate near their large pagodas at Strivilliputtur, Nanguneri, and Alwar-tirunagari.

18. The Vellalahs are the most numerous and influential class in Tinnevelly. They are to be found everywhere and as their name implies were originally cultivators of the soil. They do not now confine their attention to agriculture, but wherever money is to be made or power is to be had the Vellalahs are sure to be foremost. Astute calculators and enterprising tradesmen they are well adapted for managers, brokers, and agents, and as Government servants they fill the Courts and Cutcherries, and have almost monopolised the office of Village Accountant.

19. The Maravers are of the same family as the Kullers of Madura and Tanjore, and were no doubt the lords of the country under the old Pandiyan rule. Their caste name is Tevan, the Kullers, being known as Tevan, Shervakaran, and Vunnian; they are a very fine race of men, active and athletic, with a greater degree of manliness than any other race in Southern India. They took a prominent part in the wars of the last century and held their own successfully against the Mahomedan Government. Orone writes of them, "The colleries inhabit the woods between Trichinopoly and Cape Comorin. The name in their own language signifies thieves (Kallar, miscalled Kalleri or Collery) and justly describes their general character. Their weapon is a pike eighteen feet long with which they creep along the ground and use with great address in ambuscades. They are so far from thinking it a disgrace to be accounted thieves that they value themselves for excelling in their profession, and relate to strangers stories of desperate and successful thefts with as much complaisance as other people commemorate the heroic actions of their ancestors, and indeed when booty is their object they regard danger and death with indifference. They sally in the night from their recesses and strongholds to plunder the inhabitants of the neighbouring villages of their cattle, which if they cannot bring away alive they kill with their long spears."

20. The Zemindars of Ramnad, Shevagungah, Sattur, Sivagiri, Chockampatti, Utumalei, Urkad, Maniachi, and Singampatti are all Maravers, and in the early days of British rule the southern part of Madura and all Tinnevelly was known as the Maraver country.

21. The Kullers in the Cauvery districts are now in a transition state, and some of them do manual labor, but the Tinnevelly Maravers will not labor for hire. A great change has, however, come over them of late; they are no longer open free booters, but mostly confine themselves to their caste occupation of Kavalgars or village watchmen, and many of those not thus employed have settled down to agriculture and have abandoned their predatory habits.

22. The Kavali system, which probably originated in the levy of black mail for protection, has now resolved itself into a matter of private contract. Certain individuals of the Maraver caste, locally styled Kavalgars, who in very few instances receive any Government fees, undertake to watch the crops and keep off thieves from the villages in consideration of private fees paid by the agriculturalists in grain at harvest time, and by the non-agriculturalists in money. These fees when totalled up amount to a considerable sum, perhaps an average of a rupee on each putta or a lakh and a half of rupees; the non-agriculturalists, Inamdar, Zemindari ryots, &c., paying about a lakh more. As each putta in Tinnevelly, however, averages Rupees 22 of assessment this impost is not heavily felt, and the non-resident landholders especially find it a great convenience to have their property watched in their absence.

23. The Kavalgars, moreover, are usually a numerous body, from ten to twenty in each village according to circumstances, and their services are found to be very useful by the village officers as attendants, messengers, postmen, guides, bailiffs, escorts of treasure, and even as village police. Their services were, in fact, indispensable under former conditions, but in the present revision of village establishments the entertainment of a large body of Kavalgars on Government pay as village constables and revenue peons will conciliate part of the tribe, and may possibly reconcile the remainder to the loss of private fees which the ryots who are now charged with service cess may perhaps discontinue to pay.

24. The Shanars or palmyrah climbers are thus described by Bishop Caldwell, who has spent many years among them. "Their hereditary occupation is that of cultivating and climbing the palmyrah palm, the juice of which they boil into a coarse sugar. The majority of the Shanars confine themselves to the hard and weary labor appointed to their race; but a considerable number have become cultivators of the soil as landowners or farmers, or are engaged in trade. There is reason to suppose that the Shanars are immigrants from the northern coast of Ceylon, as it is traditionally reported that the Shanars who inhabit Tinnevelly came from the neighbourhood of Jaffna. A Shanar will climb a palmyrah almost as rapidly as a man will walk the same length, and most of them are accustomed thus to climb fifty trees twice a day, or even three times a day, for eight months in the year. Taking 60 feet as the average height of a palmyrah, and the climbing of 50 palmyrah trees twice a day as the average work of an able-bodied Shanar, we shall form a clear idea of the amount of his work if we suppose him every day for the greater part of every year to climb a perpendicular pole 3,000 feet in height and then to descend the same pole the same day, ascending and descending without any apparatus, and supporting the entire weight of his body by his strength of limb alone."

25. The chief peculiarity of the Shanars, prior to the reception of Christianity by a large part of their tribe, was the prevalence amongst them of demonolatry or the worship of evil spirits. Nowhere does it prevail to a greater extent than in Tinnevelly, where it constitutes the religion of the Shanars and of the whole of the lower classes, and enters very largely into the religion of the middle classes. The objects of worship are neither gods nor heroes but demons, which are supposed to have got the actual administration of the affairs of the world into their hands, and those demons are so numerous and cunning, so capricious and malicious and powerful that it is necessary to worship them very sedulously to keep them from doing mischief. The most important and essential feature in the worship of all demonolators is the devil dance. The officiating priest or devil dancer who wishes to represent the demon sings and dances himself into a state of wild frenzy, and leads the people to suppose that the demon they are worshipping has taken possession of him, after which he communicates to those who consult him the information he has received. The fanatical excitement which the devil dancer awakens constitutes the chief strength and charm of the system, and is peculiarly attractive to the dull perceptions of illiterate half civilized tribes. The votaries of this system are the most sincerely superstitious people in India. There is much ceremony but little sincerity in the more plausible religion of the higher classes, but the demonolators literally believe and tremble. In times of sickness, especially during the prevalence of cholera, it is astonishing with what eagerness, earnestness, and anxiety the lower classes worship their demons."

26. The Pullers were lately slaves, but are now agricultural laborers. They are never found north of the Coleroon, or far away from the rice lands, and are peculiar to the Trichinopoly, Tanjore, Madura, and Tinnevelly Districts. They receive annual wages in kind for their labor in the rice fields, and their women are specially dexterous in the operations of planting and weeding. Some Pullers have lands of their own, but none have yet acquired any considerable amount of property.

27. There are no Brinjaries, Lumbadies, Wudders, Salt Karavars, or other roving tribes in Tinnevelly. The Pariars are not numerous, but they are found in various parts of the district.

28. Under the Hindu dynasty the wet lands were lightly assessed, and payment was taken both in kind and money. From 4 to 5 cottahs of grain (20 to 25 bushels), together with from 8½ to 10½ Rupees in money, is stated to have been the limit of assessment for the cottah of land (an acre and two-thirds). This was equivalent to from 12 Rupees to 15½ Rupees an acre, or about half of the maximum till recently charged. The dry lands paid a money rent, though if the ryot had any difficulty in raising money his assessment was taken in kind.

29. The revenue system of the Mahomedans, if system it can be called, was on the contrary a mere trial of how much the district could bear by the exaction of the utmost that the ryots could pay. The grain assessment of the Hindus was raised with the addition of a Yavanah or fee of Rupees 4-10-6 per cottah of land. So far no harm was done, the aggregate assessment being much the same as before; but the grain rent was soon after abolished in favor of a money rent, the grain being commuted into money at current selling prices, while the fee was raised to Rupees 8-4-9 per cottah. No one scale of assessment, however, lasted for any time. Changes were made according to the fancy of each renter, or on the occurrence of any pressing emergency. One year a Nazzar was added. In another year the fee was reduced, but the landlord's share of the produce was raised. The fee was then raised again till the ryots were unable to pay. At one time the commutation rate was fixed at the market price and at another at a little above it. All this was changed again for a division of the net produce, *plus* fees and Nazzars, and a certain extra allowance of grain. Next 60 per cent. of the gross produce was demanded and, during the last few years of Mahomedan rule, an equal division of the net produce was again reverted to, but the fees of all kinds were raised.

30. When the country came under British rule in 1801 some of the fees and all of the Nazzars were abolished and, deducting cultivation expenses, the net produce was divided equally between the Government and the ryot. The people were naturally suspicious and unwilling to accept a money rent; for a division of the produce with the renter was the only security they had lately had for the safety of life and property, and it had been customary for all those who could to run away after harvest till re-assured by advances of grain to sow with and by specious promises of some better terms of rent.

31. For some time the district was under Amani, that is, the crop was grown and shared under the immediate supervision of the Revenue Officers, and the Government share was taken in kind. This arrangement was soon found to encourage all kinds of peculation and fraud and to throw half the grain in the country on the hands of Government who could only sell at a loss. Uncertainty for some time was felt as to the best system to introduce in supersession of Amani, as the Government for political reasons was unwilling to add to the class of large land-owners, while the ryots refused to take up their villages on the joint tenure system.

32. Thus Amani continued till 1807, when Mr. Hodgson represented that there was no longer any objection to rent out the district in large farms as "the Government had established Courts of Justice and the Poligars had been deprived of civil and criminal jurisdiction and power over the lives and services of their people;" and as to the alternative systems proposed a village rent seemed impracticable owing to the difficulty of disposing of the produce for money, while the ryotwari system was altogether unsafe, as "under a ryotwari rent there was no demand for the labor of a ryot who cultivates only what he pleases, and the inducement for him to extend his cultivation must depend on the success of the past year."

33. The result was a sort of mixed system; the villages were rented out to the villagers if they would take them, and if not to large farmers on a triennial lease, and the terms of this lease were determined by the average of the past six years, but the rents soon fell in arrears and Amani was again reverted to.

34. A decennial lease was next tried, but with much the same result; for the commutation rate was fixed at a figure so dangerously near the selling price that it allowed no margin for an adverse state of the market, and as the market happened to be greatly depressed soon after this rate was fixed the average price of grain throughout these years was actually 11 per cent. below the commutation rate.

35. It was next proposed to reduce the term of the fixed commutation rate from ten to five years, but the ryots refused to accept any rate for a longer period than one year. An annual valuation of the Government share of the produce was accordingly determined on, and this system, under the name of Ulungu, continued in force from 1822 till 1859.

36. Though the system was simple in practice it is somewhat difficult of explanation. The prices of grain during nine years of the decennial lease were collected to form an average, and after striking out the prices of the two highest years and one lowest year, and after making some discretionary remissions, the average of the remainder was fixed as the standard. This amounted to Rupees 2-11-4½ per cottah of grain, the equivalent of about a shilling a bushel, and the commutation rate of each subsequent year was adjusted with reference to this standard as under.

37. The average price of November, December, and January for the three months' crop, and of March and April for the five months' crop, was compared with the standard for each group of villages affected by any particular market. Thus if the average selling price of the current year was more than 10 per cent. in excess of the Ulungu standard 10 per cent. of the standard was struck off the average selling price, and the remainder was adopted as the commutation rate for that year. If the average selling price was within 10 per cent. above or below the

standard the standard itself was adopted; but if the average selling price was more than 5 per cent. below the standard 5 per cent. of the standard was added to the selling price as the commutation rate for that year.

38. For some time it was left to the people to settle among themselves the proportion of assessment to be borne by each field, but in 1825 the Board of Revenue ordered the introduction of a field assessment. This was to be effected in theory by a valuation of all the lands in the district with reference to situation, irrigation, &c.; but it resulted in practice in a mere arbitrary distribution of money rates in fifteen villages only.

39. The original standard of yield (to which the Ulungu commutation rate was applied) was probably much underrated, as it was based on data collected when the district was under Amani, and when it was to the interest both of the ryots and subordinate Revenue Officers to return the yield at as low a figure as possible. The Ulungu system, therefore, was not felt to be very oppressive while prices were low and tolerably steady always; but when prices began to rise rapidly the Ulungu system broke down and a change became a necessity.

40. The change effected was merely applying the standard Ulungu price to the fixed standard yield of each village as a permanent charge. This is known as Motafysal or lump assessment, and by it in theory all lands are charged alike. In practice, however, the lands are charged with some regard to circumstances, the assessment having been distributed by the people usually on the areas under the several tanks or channels, or on a series of fields, or on the average of each lease or putta. Those deviations from the system were virtually attempts to obviate the injustice of applying the same rate to good and bad land alike, but they had only partial success and were restricted to certain localities.

41. The dry lands were originally assessed by Mr. Lushington in 1802 by fixing on each chain of land (three acres and two-thirds) a percentage proportion of the total dry land assessment of the village. This assessment was better apportioned soon after by a rough survey and classification of the fields, and on the expiration of the decennial lease a comparison was made with the former accounts, and the proportion which they showed the cultivation of each class of land to bear to the whole extent of the village was entered as the cultivated area of that class of land for that fasli without any actual examination of the land. This was, as the Collector acknowledges, "a somewhat arbitrary proceeding," but it was accepted by the ryots without objection, as their dry land assessment had never been high and a very large percentage of area was classed in the lower rates. No change was afterwards made until the present revision.

42. The preliminary demarcation of boundaries for the purposes of survey and settlement commenced in 1862 and the survey was finished in 1872. In the meantime data for settlement had been worked into form and two taluqs were settled by the Collector in 1873 and two by the Additional Sub-Collector Mr. Arundel and five by the Special Assistant Vencata Chariar between 1874 and 1878, when the settlement was completed.

43. The demarcation of lands for the survey was a work of considerable difficulty, for the district formerly contained 1,099 villages, and in the river-irrigated taluqs especially these were intermixed with each other in the most bewildering manner. Thus the outer boundary of any particular village might contain detached fields belonging to two, three, five, or more adjoining villages, while often the two or three acres held by a single ryot formed a separate village, or the lands of a village were scattered in detached fragments throughout the taluq anywhere. All this has now been rectified by including some small villages in others of larger size and by merging in the parent village all lands of whatsoever description that lie within its boundary. This arrangement, with the transfers of villages needed to give each taluq a compact and convenient shape, has reduced the total number of villages from 1,099 to 886.

44. Besides theodolite stations and offsets on village and circuit boundaries 800,000 stones have been imbedded in the corners of fields, so that only the head of each stone can be seen and that is flush with the ground. This is the only way of preserving the marks, as if but partly imbedded they are liable to be either accidentally dislodged by the plough, or are purposely rooted up to form dam stones in channels or to weight ploughs and harrows. The ryots furnished the stones and imbedded them with their own labor, but the cost of supervision amounted to Rupees 1,43,816.

45. The survey is very complete. There are no tracts left unsurveyed and the topographical details are excellent. The survey fields are small, averaging perhaps two acres each, and the number of ryots' holdings in each survey field is on the average two. However small the holding may be it is separately dealt with at settlement and has a separate line in the register, and each such field or sub-division of a field forms a separate item in the putta, each ryot being only responsible for the assessment that appears in his putta, and he is under no obligation for lands that do not appear in his putta.

46. The method of making the settlement may seem perhaps somewhat laborious, but it is very complete and affords the ryots full opportunity for urging any objections.

47. The prevailing soils (black loam, sand and clay, and red loam and sand) are divided into best, good, ordinary, inferior, and worst, and the yield of each is ascertained by actual experiment made, checked by the recorded opinion of the experienced officials and ryots. Soils of like yield are bracketted together, and ten classes for irrigated and the same number for dry land are thus arrived at.

48. The conversion of the yield of irrigated land into money at the average selling price of a series of twenty years, from 1844 to 1863, is the next step in the process, but no average has been struck for the dry lands, as it was thought sufficient to apply to these the rates adopted for Salem and Trichinopoly with some slight modifications to suit local requirements.

49. Having thus ascertained the gross value of the average yield of the rice crop for each class of irrigated land deduction is made for cost of cultivation, unprofitable areas measured in by survey, &c., and a moiety of the net result is taken as a standard assessment, and this, after modification to suit the circumstances of different groups of villages, gives the following table of rates:—

Taram.	WET.												DRY.			
	Rate per Acre.												Taram.	Rate per Acre.		
	First Group.	Taram.	Second Group.	Taram.	Third Group.	Taram.	Fourth Group.	Taram.	Rate per Acre.							
1	12 0 0	2	10 8 0	3	9 0 0	4	7 8 0	1	5 0 0							
2	10 8 0	3	9 0 0	4	7 8 0	5	6 0 0	2	3 8 0							
3	9 0 0	4	7 8 0	5	6 0 0	6	4 8 0	3	2 8 0							
4	7 8 0	5	6 0 0	6	4 8 0	7	3 8 0	4	1 8 0							
5	6 0 0	6	4 8 0	7	3 8 0	8	3 0 0	5	1 0 0							
6	4 8 0	7	3 8 0	8	3 0 0	9	2 8 0	6	0 12 0							
7	3 8 0	8	3 0 0	9	2 8 0	10	2 0 0	7	0 8 0							
								8	0 6 0							
								9	0 4 0							
								10	0 3 0							

50. This assessment is for one crop only, viz., the five months' crop grown during the prevalence of the north-east monsoon. The three months' crop, grown in succession on the same land as the five months' crop in such favored localities as are supplied with water by the south-west monsoon, is arbitrarily charged for at two-thirds, half, one-third, or one-fourth additional to the single crop rate according to circumstances.

51. The fields in each of the blocks into which the villages are sub-divided for settlement purposes are charged but one rate for irrigated and one for dry land. In illustration the accompanying sketch exhibits three tracts (A, B, and C,) of 78, 82, and 21 acres, the soils of which (technically described as best, good, and ordinary black loam respectively) are ascertained to yield respectively 55, 50, and 45 bushels of unhusked rice or paddy per acre. This yield valued at the average price of 11½ Annas, or 1s. 5d. per bushel, is worth Rupees 40½ an acre in A, Rupees 36½ in B, and Rupees 32½ in C; deducting from those figures the cost of cultivation, &c., viz., Rupees 15½ in A, Rupees 14½ in B, and Rupees 13½ in C, a moiety of the result minus an abatement of 10 per cent. for unprofitable areas measured in by survey, is a close approximation to the rates of assessment for one crop, viz., Rupees 12, Rupees 10½, and Rupees 9 an acre, and these rates apply to all tracts similarly circumstanced in such like villages.

52. In inferior villages remote situation and poorer irrigation have to be allowed for, and in the village here instanced the 10½ Rupee rate is applied to lands that would be rated at Rupees 12 were they better circumstanced. In poorer villages than that shown in the sketch the 9 Rupee rate is the highest and in the lowest group of villages Rupees 7½ is the highest rate.

53. The second crop is compounded for by entire tracts or blocks and not by individual fields, and blocks A, B, C, &c., are registered as entirely double or entirely single crop. In those exceptional cases in which a little double crop cultivation is carried on in scattered patches in blocks that have not been compounded for three-quarters of the single crop rate has to be charged hereafter on the area actually cultivated with a second crop, but as a matter of fact all the

higher assessed tracts are compounded and the tendency on the part of the ryots is rather to compound for some lands hitherto only growing a single crop than to leave any double crop lands uncompounded for.

54. The land supplied by water raised by baling in any particular tract is assessed at half the rate assigned to the land directly irrigated in that tract, and the dry land interspersed in the irrigation is rated in the same class of soil as the wet land, so that, if brought under irrigation hereafter, the one class assigned to the tract may not be disturbed by the change.

55. The gardens, which are now assessed as first, second, and third class dry land, have had their assessment somewhat increased by the settlement, but it is an undoubted advantage to substitute a fixed charge for the former uncertain assessment, which varied according to crop, and to get rid of all charge for a second crop, which had the effect of preventing many of these gardens from being cultivated throughout the year.

56. The former assessment of Tinnevelly was high, and having this to compare with the present settlement has been worked out at a somewhat high figure, the average rate per acre being still above that of any other district in the Presidency.

57. The following statement exhibits the assessment of the area settled :—

WET.				DRY.			
Rate.	Area.	Assess- ment.	Average rate per Acre.	Rate.	Area.	Assess- ment.	Average rate per Acre.
RS. A. P.	ACRES.	RS.	RS. A. P.	RS. A. P.	ACRES.	RS.	RS. A. P.
20 0 0	7,713	1,54,264	...	5 0 0	453	2,267	...
17 8 0	12,785	2,23,727	...	3 8 0	3,547	12,427	...
15 12 0	3,171	49,957	...	2 8 0	35,363	88,420	...
13 8 0	20,739	2,79,948	...	1 8 0	152,443	2,28,689	...
10 0 0	18,655	1,86,543	...	1 0 0	189,799	1,89,850	...
9 0 0	4,485	40,361	...	0 12 0	142,512	1,06,921	...
7 8 0	30,598	2,20,496	...	0 8 0	99,683	49,881	...
6 0 0	27,498	1,65,031	...	0 6 0	159,025	59,751	...
5 10 0	14,441	81,307	...	0 4 0	367,569	92,215	...
4 8 0	24,747	1,11,354	...	0 3 0	53,833	10,155	...
4 6 0	8,708	38,116	...	...	...	...	...
3 12 0	1,258	4,713	...	...	...	...	...
3 8 0	9,785	34,245	...	...	...	...	...
3 0 0	320	1,006	...	...	...	...	...
3 0 0	1,654	4,968	...	...	...	...	...
2 8 0	394	985	...	...	...	...	...
2 0 0	40	80	...	...	...	...	...
Baling ...	186,991 6,253	16,06,101 25,201	8 9 5 ...	...	1,204,227	8,40,576	0 11 2 ...
	193,244	16,31,302	8 7 1	...	...	...	...

58. To review the results of the settlement the assessment of 413 villages has been raised and that of 473 villages has been lowered : 103,788 acres of the total area of the 193,244 acres irrigated have now been compounded as permanent double crop, the charge for 6,878,220 palmyrahs growing on puttā land has been consolidated and added to the land-cess. The charge for fruit trees growing on puttā land has been remitted except where the trees are owned by others than the landholders, in which case the larger trees are charged 4 Annas and coconut trees 2 Annas each per annum. The lands held in common in 198 villages have been divided among the shareholders, and the sharing system has now ceased to exist in all but 116 villages ; 38,255 puttās have been changed, and the lands entered in these puttās have now been registered in the names of the actual holders ; the boundaries of the building sites of 166 villages have been revised and the land asked for has been added to them free of charge : 10,706 acres have been set aside as grazing ground in 135 villages, and the precentage remissions in favor of privileged classes, amounting to Rupees 53,589, have been abolished, and all Government lands are now charged with full rates of assessment.

59. The opportunity of making the settlement was taken advantage of to prepare a descriptive memoir for each village showing alterations of boundary, the nature of the irriga-

tion, the last census returns, the mode in which the lands are assessed, the extent cultivated with each principal crop, the area under each money-rate, allotments for pasturage and for the extension of building sites, and a list of the lands held rent free or on favorable rates of assessment for which sanads have been granted by the Iuam Commissioner, and this memoir is faced by a sketch map showing the names of the channels, tanks, and roads of the village, and the boundaries of the settlement blocks now charged at different rates.

60. The customary labor of the villagers in the clearance of sluices and channels has been determined in concert with the villagers for each particular sluice and channel, and the result is recorded in a separate register, which, with the area and assessment, Government, Zemindari or Inam, under each source of irrigation has been bound up facing a hydraulic sketch of the village and has been handed over to the District Engineer.

61. The close association of the officers making the settlement with the villagers during a series of years was further turned to account in the construction of numerous roads, tanks, channels, bridges, sluices, and other works of public utility. The Pulameottah and Ambasamudram bridges, destroyed in the flood of 1869, were rebuilt by private subscriptions, amounting to upwards of a lakh of rupees. In the Ambasamudram Taluq Rupees 20,000 were spent on a new anicut, on 72 masonry sluices in place of the hollow palmyrahs formerly let into the channel banks, on 33 miles of new road mostly through rice lands previously impassable for carts or animals, and on the improvement of village sites and square tanks, and this amount was raised partly from subscriptions aided from local funds, and partly by the sale of the right of occupancy of certain plots of waste land since charged with full assessment. In the Tinnevelly Taluq 15 miles of new road were constructed and numerous tank banks were revetted, extended, and strengthened at a cost of Rupees 12,000 raised as above. In the Tenkarai Taluq Rupees 40,000 were subscribed for a head sluice and canal from the river and five tanks, 52 masonry works, 16 miles of roadway, 16 miles of drainage channel, and 40 miles of delivery and branch channels to the fields were constructed in connection with the works under the Strivaigundum anicut at a cost of Rupees 60,000 raised by the sale of the right of occupancy of certain plots of waste land since charged with full assessment. In the Strivilliputtur Taluq 8 miles of road, 4 bridges, and 2 choultries have been commenced at an estimated cost of Rupees 12,000 raised by private subscription and the sale of the right of occupancy of waste land as above, and the choultries have been endowed by those interested with a considerable extent of land. In other taluqs smaller sums were raised and laid out on like objects. In all nearly 2,50,000 Rupees were thus spent during the settlement.

62. In addition to the land assessment a Village Service Cess of an anna in the rupee of assessment was levied at settlement, and with this, *plus* such other emoluments as the village officers used to receive from Government, a revised establishment, costing in the aggregate Rupees 2,39,712 per annum, was arranged, so that each inhabited village should have its Accountant, its Magistrate, its Village Constable, and its Revenue Peon; larger villages have larger establishments, but the minimum is as above, and each class of village officer will be paid entirely by Government in future.

63. A hand-book on the duties of Village Officers has been published in the simple form of question and answer, and in a second edition lately prepared the fullest description is given of the method of making the settlement.

64. All that remains now to be done is to get rid of the accumulation of records of bygone revenue systems, and with the entire destruction of these up to the period of the introduction of the metaphysical system in 1859 the cutcherries will be cleared of at least two-thirds of the dusters which now choke the record-rooms.

65. In paragraph 13 of Proceedings, No. 1,289, dated 6th September 1872, the Government sanctioned a settlement that would result in an increased charge of Rupees 32,702 on the first crop in the river valley, and in paragraph 8 of Board's Proceedings, No. 1,342, dated 17th July 1872, the Board considered that there would be an unavoidable loss of Rupees 64,104 by compounding the second-crop charge. This allowed for a net decrease of Rupees 31,402 on both crops, but by careful arrangements made the settlement of the entire district has been worked out with a net loss of but Rupees 12,000, a sum hardly equivalent to the assessment of the area so long needed and now allotted for public purposes as pasturage, building sites, roads, tank beds, channels, &c. This loss will be at once made up by the extension of cultivation, but there is so little waste land in Tinnevelly, and what there is so rarely fit for cultivation that I do not expect the land revenue to rise by more than a lakh of Rupees in the most favorable season.

MADRAS,
25th March 1848.

(Signed) R. K. PUCKLE,
Director of Revenue Settlement.

ENCLOSURE NO. 4.

MEMORANDUM.

THE UTTAMALAI BOUNDARY DISPUTE.—The Uttamalai Zemindar claims 7,564 acres of land on the border of his Zemindari as wrongfully included by demarcation and survey in the following villages of the Sankaranainarkovil Taluk :—

	ACRES.
Sayamalai	853
Do.	205
Achampatti	2,189
Kila Nilidanallur	1,443
Mela Nilidanallur	2,365
Vannikonandal	510
	<hr/>
	7,564

Of these 7,006 acres are cultivated, 272 acres are culturable waste, and 287 acres are poramboke ; the assessment of the cultivated area last year was Rupees 2,848 and Government puttus are held by 550 ryots mostly belonging to the Zemindari.

The hamlets comprised in this area and claimed as Zemindari are—

Sayamalai—1st block, Valangiyampatti.

Sayamalai—2nd block, Naikamarkudi Irupu.

Achampatti—Part of Mela Narikudi, part of Kila Narikudi, Mutirulampatti, Ardhapermalpatti.

Kila Nilidanallur—Yeliyapermalpatti.

Mela Nilidanallur—Panavadali, Maradapapuram.

Vannikonandal—part of Mela Narikudi, part of Kila Narikudi.

Though there are now no hamlets in the disputed blocks in Sayamalai, the sites of Valangiyampatti and Naikamarkudi Irupu are pointed out by both Government and Zemin ryots, and a kyfeat has been given by the Munsif, Mirassidars, Natamgars, Curnam and some of the Puttadars concerned in Sayamalai to the effect that these hamlets first came into the accounts of their village in Fasli 1236 when the Uttamalai estate was under Government management, and that though the hamlets themselves have disappeared in the course of time, the lands now claimed by the Zemindar are identical with those that first formed part of Sayamalai in Fasli 1236. How these lands were included in the village, nobody knows, as there is no order of transfer on record, but no one has any objection to urge to these lands being now transferred to the Uttamalai Zemindari, the hamlets of Valangiyampatti and Naikamarkudi Irupu appear in the Istimrah Sanad of the Uttamalai Zemindari, and there are no such hamlets in that Zemindari at present. The identity of the lands claimed in Sayamalai with those that have disappeared from the Zemin accounts is beyond doubt, and the areas claimed, viz., 853 and 205 acres, should be transferred to the Zemindari, Khandams 23, 26, and 27 being transferred territorially, but for greater convenience and to avoid resurvey the remainder in Khandams 9, 10, 22, and 25 will be retained in Samayalai, but will be registered as Zemindari.

The hamlets of Mela Narikudi, Kila Narikudi, Ardhapermalpatti and Mutirulampatti also came into Achampatti (then part of Sayamalai) in Fasli 1236, and the village officers and ryots depose in like manner to the fact. Mela Narikudi and Kila Narikudi still exist. Ardhapermalpatti is now known as Permalpatti, and Mutirulampatti has disappeared, but its site is still pointed out, and the new hamlet of Venecatachelapuram has sprung up close by. These four hamlets are mentioned in the Istimrah Sanad, and there are no other hamlets of like name in the Zemindari, and the ryots and village officers depose as above that they have no objection to these hamlets being included in the Zemindari. The area claimed, viz., 2,189 acres, should be made over to the Zemindari, but for greater convenience and to avoid resurvey only entire Khandams, viz., 28, 29, 35, 36, 37, 38, 39 and 40 will be transferred territorially, the remainder, a few acres in Khandam 41, will be retained in Achampatti, but be registered as Zemindari.

The hamlet of Yeliyapermalpatti and a portion of Panavadali came into Kila Nilidanallur (then part of Nelidanallur) also in Fasli 1236 ; the name of Yeliyapermalpatti disappeared and that of Vannonpatal has taken its place probably from fuller's earth being found in the neighbourhood. The ryots depose as above that the land came into their village when the Uttamalai estate was under Government management without special authorization, and that they have no objection to the transfer of the area claimed to the Zemindari. Yeliyapermalpatti appears in the Istimrah

Sanad, and is not now to be found in the Zemindari, while Panavadali still exists as a Zemindari village close by. The area claimed, viz., 1,443 acres, should be transferred to the Zemindari, Khandams 12, 31, and 32 being transferred territorially, and the remainder in Khandams 10 and 11 will for greater convenience and to avoid resurvey be retained in Kila Nilidanallur, but be registered as Zemindari. The hamlet of Panavadali in part and all Maradapapuram comprising 1,592 acres came into Mela Milidanallur (then part of Nilidanallur) also in Fasli 1236, and their sites are pointed out as the present Terku Panavadali and Vadaku Panavadali; the new hamlet of Chokalingapuram has also sprung up, the greater part of the lands about which formerly formed part of Vadaku Balabadraramapuram, a Zemindari village still existing close by; the ryots and village officers depose as above and have no objection to the transfer of the area claimed to the Zemindari. These hamlets appear in the Istimrah Sanad, and there are no other hamlets of these names now in the Zemindari. The area claimed, viz., 2,365 acres, should therefore be transferred to the Zemindari, Khandams 24, 25, 26, 27, 28, 29, and 30 being territorially transferred to the Zemindari. In like manner the 1st and 2nd khandams of Vannikonandal, which formerly formed part of the hamlets of Mela Narikudi and Kila Narikudi alluded to above, came into the accounts of Vannikonandal in Fasli 1236, and the ryots and village officers have no objection to the transfer of the area claimed to the Zemindari. These khandams comprising 510 acres will therefore be transferred territorially to the Zemindari. This boundary has been long in dispute. The estate was under management from Fasli 1236 to 1247, and the then Collector commenced an inquiry as far back as Fasli 1244, but nothing came of this till Fasli 1266 when the then Collector gave an endorsement to the Zemindar to the effect that the case would be inquired into at settlement; the settlement of the Sankaranainarkovil Taluq has now been made, and the Special Assistant Venkatachariar at the time of final hearing of appeals has gone into the matter thoroughly. The accounts of the Government villages show 1,400 acres of the area claimed to form part of those villages, but such accounts are not always reliable; and even were they to be accepted in the face of the strong counter-evidence adduced, there are still 6,164 acres that are not borne in the Government accounts as Government land prior to Fasli 1236. Under these circumstances, and for the causes noted above, it seems but fair and equitable to adjudge the entire area claimed to the Zemindari, and this I have accordingly done.

KOVILPATTI,
5th March 1878.

(Signed) R. K. PUCKLE,
Director of Revenue Settlement.

(True Copy.)

(Signed) R. K. PUCKLE,
Director of Revenue Settlement.

ENCLOSURES Nos. 5 and 6.—Maps.

With the foregoing letter Mr. Puckle submits reports from the Special Assistant, T. Venkata Chariar, and Additional Sub-Collector, Mr. Arundel, on the Settlement of the Sankaranainarkovil and Strivilliputtur Taluqs. The completion of these two taluqs brings to a close the operations of the department in the district, and Mr. Puckle has reviewed the method of working and results of the settlement in an interesting memorandum which gives a succinct and clear description of the characteristics of the district, its former revenue systems, and the procedure adopted in the revision just brought to a successful close.

2. The Sankaranainarkovil Taluq formerly comprised forty villages; the number has been raised to fifty-eight by subdivision of large villages. The irrigation is precarious, depending mainly on hill streams, and the soil mostly poor; the rates formerly prevailing, especially as regards land under rain-fed tanks, were unduly high and remissions, averaging nearly Rupees 40,000 annually, have been consequently rendered necessary. The villages irrigated by minor rivers have been placed in the third

group and those under rain-fed tanks in the fourth. The revised assessment and area by survey are shown in comparison with the old area and assessment in the subjoined abstract :—

	AREA.		ASSESSMENT.		DIFFERENCE.	
	By Pai-mash.	By Survey.	As per Jama-bandhi of Fasli 1286.	Revised.	Extent.	Assessment.
River-irrigated.						
1st crop ...	8,557	8,896	{ 49,590	46,773	{ + 339	— 2,817
2nd crop ...			6,154	1,038		
Rain-fed ...	{ 1st crop ...	4,336	{ 22,480	20,412	{ + 216	— 2,068
	2nd crop ...		3,437	282		
Baling ...	{ 1st crop ...	224	{ 447	548	{ + 32	+ 101
	2nd crop ...		90	25		
Total wet ...	... ... ...	13,117	13,704	82,198	+ 587	— 4,784
Dry ...	... ... ...	110,325	115,852	97,446	+ 5,527	— 606
Total wet and dry ...	... ...	123,442	129,556	1,79,644	+ 6,114	— 13,776
First crop ...	... ...			1,69,963	1,64,573	— 5,390
Deduct remissions formerly granted ...	... ...			5,959	...	+ 5,959
Total ...	...	...	1,64,004	1,64,573	...	+ 569

3. The comparison is made between the first-crop charge only, because, owing to special causes explained, the amount brought to account under the head of Second Crop last year was unduly enhanced. Comparing the charge for second crop by settlement with the former assessment of the area now compounded for, there is an increase of Rupees 31, making the net result of the settlement an increase of Rupees 600 or .36 per cent.; including the palmyra charge the increase is Rupees 1,387 or .84 per cent. The result of the survey is the ascertainment of an increase of about 5 per cent. The average settlement rates compare with those previously existing as marginally shown. The wet rates range from Rupees 7-8-0 for single crop and Rupees 10 consolidated charge for two crops to Rupees 2 per acre, and the second-crop charge has been compounded for on one-quarter and one-third additional to the first-crop charge. Where composition has not been effected the charge is three-fourths of the single-crop rate. The palmyra revenue is trifling—under the usual method of settlement Rupees 1,149 will be realized against Rs. 362 according to the Jamabandi accounts, showing an increase of Rupees 787. The extent of the unoccupied culturable waste is not specified; the assessment thereon is Rupees 3,500, and it is anticipated that the greater portion of it will eventually come under cultivation.

	By Jama-bandhi.	By Settlement.
Wet—	RS. A. P.	RS. A. P.
River-irrigated ...	5 12 9	5 4 1
Rain-fed ...	6 2 1	4 7 9
Total wet ...	5 9 8	4 15 11
Dry ...	0 14 1	0 13 4

The result of the survey is the ascertainment of an increase of about 5 per cent. The average settlement rates compare with those previously existing as marginally shown. The wet rates range from Rupees 7-8-0 for single crop and Rupees 10 consolidated charge for two crops to Rupees 2 per acre, and the second-crop charge has been compounded for on one-quarter and one-third additional to the first-crop charge. Where composition has not been effected the charge is three-fourths of the single-crop rate. The palmyra revenue is trifling—under the usual method of settlement Rupees 1,149 will be realized against Rs. 362 according to the Jamabandi accounts, showing an increase of Rupees 787. The extent of the unoccupied culturable waste is not specified; the assessment thereon is Rupees 3,500, and it is anticipated that the greater portion of it will eventually come under cultivation.

4. With reference to paragraph 23 of the Special Assistant's report, the Collector is requested to take the completion of the Tonakal channel, which is spoken of as a desirable work, into consideration, and report what has been done and what remains to be done, whether the undertaking is likely to prove remunerative, what funds are available, and how the balance can be provided. A loan under the Land Improvement Act would probably be the best way of giving the required assistance.

5. In connection with the settlement of this taluq it appears that a long-standing boundary dispute was decided by Mr. Puckle, and a copy of his decision in the case is forwarded. It seems that the Uttamallai Zemindar claims 7,564 acres of land on the border of his Zemindari situated in five Government villages which, it is alleged, were included in his Sanad, but were wrongfully added to the Government villages by the Amins and Curnams during the management of the Zemindari by Government. Of the above extent 7,006 acres are cultivated, the assessment last fasli amounting to Rupees 2,848; 272 acres are culturable waste and 287 acres are porumboke. Mr. Puckle has adjudged the entire area to the Zemindar, on the ground that the village officers and ryots deposed that the lands in dispute are identical with the sites of certain hamlets mentioned in the Zemindar's Sanad, but not now to be found in the Zemindari. These lands are stated to have been transferred to the Government villages, with which they have hitherto been incorporated, in Fasli 1236, half a century ago, and in some cases the hamlets claimed no longer exist, in others their names have been changed; the estate came under management in Fasli 1236, the very year of the transfer, and continued under management till Fasli 1247; the Collector is stated to have commenced an enquiry in Fasli 1244, but why the estate was taken under management and how the claim originated is not stated. In Fasli 1266, the then Collector gave an endorsement to the Zemindar that the case would be inquired into at settlement, and it is stated that a full investigation has been made by Mr. Symonds and Venkatachariar.

6. The records of the case are not before the Board, but the claim appears to have been decided in favor of the Zemindar solely on the oral testimony of the village officers and ryots as to the identity of the land in dispute with certain hamlets which have disappeared from the Zemindari though specified in the sanad; no accounts appear to have been adduced in support of the claim; on the other hand the accounts of the Government villages show 1,400 acres of the area claimed to form part of those villages, but this evidence is rejected on the ground that such accounts are not always reliable, and that even if they were to be accepted in the face of the strong counter-evidence adduced, there are still 6,164 acres that are not borne in the Government accounts as Government land prior to Fasli 1236. Although village accounts may not always be reliable the probability is that they are more trustworthy than the recollection of witnesses, possibly interested in the result, deposing to an occurrence which is alleged to have taken place half a century ago; and this evidence coupled with possession for so long a period was certainly, in the Board's opinion, sufficient to warrant the rejection of the claim, so far as the 1,400 acres were concerned, unless the Zemindar could prove it in a Civil Court. As regards the 6,164 acres not borne in the Government accounts before Fasli 1236, the fact that the matter appears to have been by no means clear in Fasli 1244, only eight years after the erroneous transfer is alleged to have been made, leads the Board to regard the evidence now adduced as by no means conclusive; the record may throw further light on the subject, but on the information now before them the Board are not prepared to recommend the acceptance of Mr. Puckle's decision. The decision does not purport to have been formally passed under the Act (XXVIII of 1860); and if it was not, Mr. Puckle's proceedings were *ultra vires*, the decision of a boundary dispute of such importance and long standing not falling within the scope of ordinary settlement operations. The Acting Director will be requested to forward the whole record to the Board to enable them to take legal advice if necessary, and decide whether the Zemindar should not be referred to the Courts to establish his claim.

7. The Settlement of the Strivilliputtur Taluq was made by Mr. Arundel; it formerly consisted of 135 villages, but the number has been reduced to 90 by amalgamation of uninhabited villages, &c. The soil is for the most part fertile and the villages adjacent to the range of the Western Ghauts are fairly well watered. The conditions, therefore, are favorable, though sundry anomalies in the former rating required rectification. All the villages have been placed in the third group, with one exception. The wet rates range from Rupees 9 to Rupees 2-8-0 per acre for single crop, and the dry from Rupees 3-8-0 for the best garden lands to 6 Annas for the poorest

soils. The following abstract shows the revised assessment and area by survey in comparison with the old area and assessment :—

	AREA.		ASSESSMENT.		DIFFERENCE.	
	By Paimash.	By Survey.	As per Jamabandi of Fasli 1286.	Revised.	Extent.	Assessment.
Irrigated { 1st crop.)						
{ 2nd crop.)	20,399	21,978	1,32,436	1,27,637	+ 1,579	- 10,445
Buling	280	297	10,819	5,173	+ 17	+ 239
Garden lands	6,383	6,783	11,617	17,777	+ 400	+ 6,160
Ordinary dry	142,229	149,673	1,83,898	1,80,373	+7,444	- 3,525
Total ...	169,291	178,731	3,39,307	3,31,736	+ 9,440	- 7,571
Deduct permanent remissions ... ...	...	...	10,969	...	...	+ 10,969
Occasional 2nd-crop charge ... ...	...	...	8,415	...	...	+ 8,415
	...	...	3,19,923	3,31,736	...	+ 11,813

8. The second-crop charge has been consolidated on 4,730 acres ; on this area there is an increase of Rupees 2,769 by settlement, but the Director points out that owing to exceptional causes the revenue from second crop was unduly enhanced last year, the area so cultivated in Fasli 1286 being nearly three times that appearing in the accounts of Fasli 1285 ; he has rightly, therefore, deducted the charge for second crop on so much of the area shown in the accounts of Fasli 1286 as has not been compounded for, viz., Rupees 8,415, in calculating the results of the settlement. If the increase by consolidation of the charge for palmyrahs, Rupees 307, be added, the net result is an increase of Rupees 12,120 or 3·7 per cent. on the revenue of Fasli 1286. The result of the survey is the ascertainment of an excess over the area by paimash of 5·5 per cent. The average rates compared with those previously existing are marginally noted. It will be seen that relief has been given to the holders of the inferior dry soils whilst a moderate increase has been imposed upon the superior garden lands. The extent of culturable waste and the assessment charged thereon is not mentioned.

	By Jamabandi.	By Settlement
	Rs. A. P.	Rs. A. P.
Wet { River-irrigated	6 9 7	5 15 0
Rain-fed ...	5 10 10	4 12 9
{ Total wet ...	6 7 11	5 12 11
Dry { Garden ...	1 13 1	2 9 11
Ordinary ...	1 4 8	1 3 3

9. As regards the deductions hitherto made from the revenue on account of payments to village artizans and religious institutions, they should of course be continued. No mention appears to have been made of such deductions in connection with the settlement of any other taluq of the district though it is presumed that similar allowances exist elsewhere. The Director of Revenue Settlement is requested to report on the point.

10. Adverting to paragraph 30, the Board are decidedly of opinion that it would be a pity not to complete the redemarcation of the taluq and think that a few hands should be retained for the purpose. The matter appears to have been sufficiently attended to in Sankaranainarkovil. Much good work appears to have been done in Strivilliputtur by inducing the ryots to contribute towards or undertake at their own expense local improvements.

11. As the Board have already reviewed the reports on each taluq separately, as submitted, it is unnecessary to comment upon Mr. Puckle's history of the operations of the Settlement Department throughout the whole district. As no figured statement

of the financial results has, however, been submitted, the statement appended has been prepared to show at a glance the revenue for each taluq. The Board note with pleasure Mr. Puckle's testimony to the services rendered by his Special Assistant and the Additional Sub-Collector and congratulate him on the successful completion of his labors in revising the Settlement of the Tinnevelly District.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

To the Secretary to Government, Revenue Department, with two Maps
to be returned, and a Statement.

„ Collector of Tinnevelly, with a Statement.
„ Director of Revenue Settlement, with do.

Exd. A. Grubert, J. Tulloch and W. H French.



1877.

**Board of Revenue
MADRAS.**

PROCEEDINGS, 21ST JUNE 1878, No. 1,707

Enc.

Received

J U N E.
No. 1,707.

Settlement — of Sankaranainarkovil and Villiputtur Taluqs, Tinnevelly District.— viewing reports on the — ; requesting Collector to report regarding the completion of the Tidal Channel ; and calling for records connected with the Utiomalai boundary dispute.